

October 2002

Annual Actuarial Valuation
June 30, 2002
Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

MERCER

Human Resource Consulting

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
I	INTRODUCTION	K - 1
II	ACTUARIAL CONSIDERATIONS	K - 2
III	RESULTS OF THE 2002 ACTUARIAL VALUATION	K - 11
IV	COMMENTS AND CERTIFICATION	K - 23
V	STATISTICAL DATA	K - 27
	<u>ACTIVE LIVES:</u>	
	EARNINGS BY AGE GROUPS; BY SERVICE GROUPS	K - 28
	SERVICE GROUPS BY AGE GROUPS	K - 30
	AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS	K - 32
	TABULATION BY MONTHLY SALARY	K - 34
	MEMBERS WITH SERVICE IN ANOTHER SYSTEM	K - 36
	<u>INACTIVE LIVES:</u>	
	RETIRED LIVES SUMMARY	K - 38
	BENEFICIARY SUMMARY	K - 40
	VESTED RETIREMENT SUMMARY	K - 42
	VESTED MEMBERSHIP SUMMARY	K - 44
VI	SUMMARY OF PRINCIPAL PLAN PROVISIONS	K - 46

COUNTY EMPLOYEES RETIREMENT SYSTEM

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
I	INTRODUCTION	C - 1
II	ACTUARIAL CONSIDERATIONS	C - 2
III	RESULTS OF THE 2002 ACTUARIAL VALUATION	C - 11
IV	COMMENTS AND CERTIFICATION	C - 23
V	STATISTICAL DATA	C - 27
	<u>ACTIVE LIVES:</u>	
	EARNINGS BY AGE GROUPS; BY SERVICE GROUPS	C - 28
	SERVICE GROUPS BY AGE GROUPS	C - 30
	AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS	C - 32
	TABULATION BY MONTHLY SALARY	C - 34
	MEMBERS WITH SERVICE IN ANOTHER SYSTEM	C - 36
	<u>INACTIVE LIVES:</u>	
	RETIRED LIVES SUMMARY	C - 38
	BENEFICIARY SUMMARY	C - 40
	VESTED RETIREMENT SUMMARY	C - 42
	VESTED MEMBERSHIP SUMMARY	C - 44
VI	SUMMARY OF PRINCIPAL PLAN PROVISIONS	C - 46

STATE POLICE RETIREMENT SYSTEM

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
I	INTRODUCTION	S - 1
II	ACTUARIAL CONSIDERATIONS	S - 2
III	RESULTS OF THE 2002 ACTUARIAL VALUATION	S - 10
IV	COMMENTS AND CERTIFICATION	S - 21
V	STATISTICAL DATA	S - 24
	<u>ACTIVE LIVES:</u>	
	EARNINGS BY AGE GROUPS; BY SERVICE GROUPS	S - 25
	SERVICE GROUPS BY AGE GROUPS	S - 26
	AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS	S - 27
	TABULATION BY MONTHLY SALARY	S - 28
	MEMBERS WITH SERVICE IN ANOTHER SYSTEM	S - 29
	<u>INACTIVE LIVES:</u>	
	RETIRED LIVES SUMMARY	S - 30
	BENEFICIARY SUMMARY	S - 31
	VESTED RETIREMENT SUMMARY	S - 32
	VESTED MEMBERSHIP SUMMARY	S - 33
VI	SUMMARY OF PRINCIPAL PLAN PROVISIONS	S - 34

FORTY-SIXTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 2002

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

SECTION I

INTRODUCTION

The results of the forty-sixth annual actuarial valuation of the Kentucky Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2002.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contributions for the ensuing fiscal year required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding, as defined in KRS 61.565, provides that the actuarial valuation method is uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide member's benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus

any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no change in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation, as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase.

In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND		INSURANCE FUND	
	Non Hazardous	Hazardous	Non Hazardous	Hazardous
June 30, 2001 Valuation Assets	6,844,742,687	361,677,475	449,630,605	119,372,742
Cash Flows				
> Employer Contributions	97,946	7,764,651	93,912,017	15,887,398
> Member Contributions	109,485,664	10,740,148		
> Retirement Benefits	345,665,528	10,202,893		
> Net Refunds	4,097,348	1,074,889		
> Insurance Premiums			43,695,857	2,449,250
> Administrative Expenses	4,399,326	288,542	345,297	28,501
> Investment Manager Fees	3,311,221	193,778	163,451	44,787
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	554,465,817	30,116,610	39,144,956	10,399,552
Expected Valuation Assets	7,151,318,691	398,538,782	538,482,973	143,137,154
Actual Market Value of Assets	5,005,190,948	301,799,829	465,664,515	109,769,410
Investment Gain/(Loss)	(2,146,127,743)	(96,738,953)	(72,818,458)	(33,367,744)
Valuations				
> Valuation Year - 1				
>> Initial Amount	(1,700,223,672)	(70,167,218)	(66,720,677)	(14,725,573)
>> Current Valuation Amount	(1,360,178,938)	(56,133,774)	(53,376,542)	(11,780,458)
>> Amortization	(340,044,734)	(14,033,444)	(13,344,135)	(2,945,115)
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	(1,360,178,938)	(56,133,774)	(53,376,542)	(11,780,458)
Investment Gain/(Loss) to be Amortized from Current Valuation Date				
> Amount	(785,948,805)	(40,605,179)	(19,441,916)	(21,587,286)
> Amortization	(157,189,761)	(8,121,036)	(3,888,383)	(4,317,457)
June 30, 2002 Valuation Assets				
> Expected Assets	7,151,318,691	398,538,782	538,482,973	143,137,154
> Amortization Amounts	(497,234,495)	(22,154,480)	(17,232,518)	(7,262,572)
> Valuation Assets	6,654,084,196	376,384,302	521,250,455	135,874,582

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

- (1) Mortality:
 - (a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.
 - (b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).
- (2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).
- (3) Termination of employment - Graduated select (non-hazardous and hazardous) and ultimate rates based on 2000 experience study.
- (4) Retirement - Non-Hazardous:

<u>Age</u>	<u>Retirement Rate</u>
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 & Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 60.

- (5) Marital status
 - (a) Percentage married - 100%.
 - (b) Age difference - Males are assumed to be 3 years older than their spouses.
- (6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.
- (7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.
- (8) Compensation progression - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.
- (9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression assumptions.
- (10) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Pre-Medicare Coverage - - -
Rate in Effect on Valuation Date

	<u>Single</u>	<u>Couple</u>	<u>Parent Plus</u>	<u>Family</u>
Region 1	\$234.00	\$473.96	\$315.96	\$526.60
Region 2	260.44	527.44	351.60	586.04
Region 3	300.64	608.96	405.96	676.60
Region 4	320.96	650.00	433.32	722.24
Region 5	340.48	689.44	459.64	766.04
All others	245.00	522.92	348.64	581.04

Region 1: Boone, Campbell, Gallatin, Grant, Kenton and Pendleton

Region 2: Allen, Ballard, Bell, Caldwell, Calloway, Carlisle, Clay, Crittenden, Fulton, Graves, Harlan, Harrison, Hickman, Hopkins, Knott, Lincoln, Livingston, Lyon, McCracken, Marshall, Perry, Pike, Robertson, Rockcastle, Rowan, Simpson and Webster

Region 3: Lewis, Mason, Morgan and Pulaski

Region 4: Boyd, Carter, Christian, Daviess, Elliott, Greenup, Hancock, Henderson, Lawrence, McLean, Todd, Trigg and Union

Region 5: Breckinridge and Grayson

<u>Carrier</u>	<u>Medicare Rate</u>		<u>Contracts in Force</u>	
	<u>Low Option</u>	<u>High Option</u>	<u>Low Option</u>	<u>High Option</u>
Anthem BC/BS	103.18	252.56	3,258	20,040
Bankers Life	82.70	195.35	594	331
Option 2000	98.18	247.56	547	1,852

Weighted Medicare Coverage - - -
Rate in Effect on Valuation Date

	<u>Low Option</u>	<u>High Option</u>
All members	\$99.79	\$251.29

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

<u>Years</u>	<u>Medical Increase</u>
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:
 - . If reported salary was zero or blank, then monthly salary was assumed to be \$911.64
 - . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple
Service Records

- For active members with service in more than one system, the liability has been valued as follows:
 - . Service under all systems is aggregated for purposes of determining benefit eligibility.
 - . Future service is projected only under the system in which the member is currently active.
 - . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
 - . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

<u>Age</u>	<u>Active Mortality</u>		<u>Disabled Mortality</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

<u>Age</u>	<u>Disablement</u>	<u>Ultimate Termination</u>
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

	<u>Years of Service</u>	<u>Select Termination</u>	
		<u>Non-Hazardous</u>	<u>Hazardous</u>
	1	35.0%	30.0%
	2	10.0%	8.0%
	3	7.0%	4.0%
	4	5.0%	4.0%
	5	4.0%	4.0%

(4) Compensation Progression (after 1st 3 Years):

<u>Age</u>	<u>Rate of Annual Increase</u>	<u>Compensation at Normal Retirement as Percentage Of Current Annual Compensation</u>
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees (other than select termination) are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2002 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2002.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2002 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the State is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 2002 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements for the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2002

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND		
		Percent *
Total Actuarial Accrued Liability	\$ 6,348,163,928	368.50%
Assets at Actuarial Value	7,030,468,498	408.10%
Unfunded Actuarial Accrued Liability	\$ (682,304,570)	(39.60%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	\$ (37,177,569)	(2.16%)
NORMAL COST - RETIREMENT FUND		
Retirement Benefits	\$ 138,184,081	8.02%
Disability Benefits	16,838,158	0.98%
Withdrawal Benefits (Vested and Refund of Contributions)	11,517,878	0.67%
Survivor Benefits	8,679,564	0.50%
Total Normal Cost	\$ 175,219,681	10.17%
Less: Employee Contributions	88,848,935	5.16%
Normal Cost - State	\$ 86,370,746	5.01%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND		
Non-Hazardous Duty Cost		
Normal Cost	\$ 74,535,815	4.67% **
Payment on Unfunded Actuarial Accrued Liability	(34,170,196)	(2.14%) **
Administrative Expense	5,213,214	0.33% **
Subtotal - Retirement Fund (Not Less Than Zero)	\$ 45,578,833	2.86% **
Group Hospital and Medical Insurance Premiums	74,595,988	4.67% **
Total Annual Cost	\$ 120,174,821	7.53% **
Hazardous Duty Cost		
Normal Cost	\$ 11,834,931	9.44% ***
Payment on Unfunded Actuarial Accrued Liability	(3,007,373)	(2.40%) ***
Administrative Expense	419,454	0.33% ***
Subtotal - Retirement Fund (Not Less Than Zero)	\$ 9,247,012	7.37% ***
Group Hospital and Medical Insurance Premiums	14,380,123	11.47% ***
Total Annual Cost	\$ 23,627,135	18.84% ***
Based on estimated annual salaries		
* Total	\$ 1,722,716,091	
** Non-Hazardous Position Employees	\$ 1,597,344,487	
*** Hazardous Position Employees	\$ 125,371,604	

TABLE II
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2002

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	\$ 2,391,720,700	\$ 193,090,139	\$ 2,584,810,839
Disability Benefits	159,191,237	10,607,049	169,798,286
Withdrawal Benefits (Vested and Refund of Contributions)	84,792,416	991,375	85,783,791
Survivor Benefits	148,047,218	7,332,127	155,379,345
Total - Actives	\$ 2,783,751,571	\$ 212,020,690	\$ 2,995,772,261
Inactive Members			
Retired Members and Beneficiaries	\$ 3,189,273,887	\$ 106,564,057	\$ 3,295,837,944
Vested Retirement	38,243,383	2,432,355	40,675,738
Vested Membership	14,825,923	1,052,062	15,877,985
Total - Inactives	\$ 3,242,343,193	\$ 110,048,474	\$ 3,352,391,667
Total Actuarial Accrued Liability	\$ 6,026,094,764	\$ 322,069,164	\$ 6,348,163,928
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	\$ 6,026,094,764	\$ 322,069,164	\$ 6,348,163,928
Less Actuarial Value of Assets	6,654,084,196	376,384,302	7,030,468,498
Unfunded Actuarial Accrued Liability	\$ (627,989,432)	\$ (54,315,138)	\$ (682,304,570)
NORMAL COST			
Retirement Benefits	\$ 120,522,905	\$ 17,661,176	\$ 138,184,081
Disability Benefits	14,897,774	1,940,384	16,838,158
Withdrawal Benefits (Vested and Refund of Contributions)	10,717,618	800,260	11,517,878
Survivor Benefits	7,756,666	922,898	8,679,564
Total Normal Cost	\$ 153,894,963	\$ 21,324,718	\$ 175,219,681
Less Employee Contributions	79,359,148	9,489,787	88,848,935
Total Normal Cost - State	\$ 74,535,815	\$ 11,834,931	\$ 86,370,746

TABLE III
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
Non-Hazardous Position Employees				
6/30/1990	\$ 256,534,456	\$ 322,956,775	\$ 22,960,935	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	103,692,389	129,545,972	\$ 8,846,824	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(212,448,599)	(262,684,748)	\$ (17,277,827)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	(57,917,315)	(70,702,574)	\$ (4,489,896)	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	59,519,052	71,576,448	\$ 4,398,086	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	65,659,241	77,629,496	\$ 4,624,700	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,573,585)	(218,793,690)	\$ (12,660,278)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(277,888,742)	(315,617,917)	\$ (17,768,342)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(326,522,755)	(362,475,168)	\$ (19,883,938)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(362,615,121)	(392,892,850)	\$ (21,029,983)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998; Benefit multiplier change effective 7/1/1999
6/30/2000	(964,739,576)	(1,018,915,456)	\$ (53,286,222)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	584,703,884	601,232,196	\$ 30,757,837	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000; 3-year average earnings window
6/30/2002	811,152,084	811,152,084	\$ 40,637,908	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	\$ (509,444,587)	\$ (627,989,432)	\$ (34,170,196)	

TABLE III (Continued)
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
Hazardous Position Employees				
6/30/1990	\$ (366,782)	\$ (461,750)	\$ (32,829)	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	8,515,857	10,639,113	726,556	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(2,222,347)	(2,747,848)	(180,737)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	1,873,766	2,287,399	145,259	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	2,736,468	3,290,823	202,208	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	4,677,834	5,530,643	329,483	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(33,735,166)	(39,141,440)	(2,264,880)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(7,971,975)	(9,054,335)	(509,732)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(13,896,455)	(15,426,552)	(846,239)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit
6/30/1999	(13,902,335)	(15,063,155)	(806,270)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(35,735,060)	(37,741,796)	(1,973,783)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	18,907,681	19,442,160	994,622	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
6/30/2002	24,131,600	24,131,600	1,208,969	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	\$ (46,986,914)	\$ (54,315,138)	\$ (3,007,373)	

TABLE IV KENTUCKY EMPLOYEES RETIREMENT SYSTEM INSURANCE FUND DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2002			
	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members	\$ 1,007,370,859	\$ 145,840,544	\$ 1,153,211,403
Inactive Members			
Retired Members	\$ 842,074,743	\$ 73,001,801	\$ 915,076,544
Beneficiaries	1,137,510	13,952,152	15,089,662
Vested Retirement	57,100,769	4,024,553	61,125,322
Vested Membership	0	0	0
Total - Inactives	\$ 900,313,022	\$ 90,978,506	\$ 991,291,528
Total Actuarial Accrued Liability	\$ 1,907,683,881	\$ 236,819,050	\$ 2,144,502,931
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	\$ 1,907,683,881	\$ 236,819,050	\$ 2,144,502,931
Less Actuarial Value of Assets	521,250,455	135,874,582	657,125,037
Unfunded Actuarial Accrued Liability	\$ 1,386,433,426	\$ 100,944,468	\$ 1,487,377,894
NORMAL COST			
Gross Normal Cost	\$ 86,804,903	\$ 18,439,001	\$ 105,243,904
Less Employee Contributions	0	0	0
Net Normal Cost - State	\$ 86,804,903	\$ 18,439,001	\$ 105,243,904
Estimated Annual Salaries	\$ 1,597,344,487	\$ 125,371,604	\$ 1,722,716,091
TOTAL ANNUAL EMPLOYER COST			
Contribution Amount			
Normal Cost	\$ 86,804,903	\$ 18,439,001	\$ 105,243,904
Payment on Unfunded Actuarial Accrued Liability	78,356,913	5,703,819	84,060,732
Total Annual Cost	\$ 165,161,816	\$ 24,142,820	\$ 189,304,636
As Percent of Payroll			
Normal Cost	5.43%	14.71%	6.11%
Payment on Unfunded Actuarial Accrued Liability	4.91%	4.55%	4.88%
Total Annual Cost	10.34%	19.26%	10.99%
INSURANCE FUND SHORTFALL			
Full Entry Age Funding Level	10.34%	19.26%	10.99%
Current Funding Allocation *	4.67%	11.14%	5.14%
Additional to Pick Up By 2016	5.67%	8.12%	5.85%
Expected Increase in Insurance Fund Rate in 2003 Valuation	0.27%	0.44%	N/A
* Without regard to any one-year temporary adjustments for actuarial gains			

TABLE V
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
Non-Hazardous Position Employees				
6/30/1996	\$ 988,745,810	\$ 1,147,198,557	\$ 66,381,497	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	(31,222,593)	(35,461,708)	(1,996,388)	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	19,914,214	22,106,908	1,212,697	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(69,145,663)	(74,919,205)	(4,010,125)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	44,198,913	46,680,946	2,441,273	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	237,627,565	244,344,782	12,500,190	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	36,483,146	36,483,146	1,827,769	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$ 1,226,601,392	\$ 1,386,433,426	\$ 78,356,913	
Hazardous Position Employees				
6/30/1996	\$ 61,002,123	\$ 70,778,099	\$ 4,095,504	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	15,100,456	17,150,658	965,531	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	2,832,306	3,144,162	172,476	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(10,377,564)	(11,244,071)	(601,850)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(3,445,265)	(3,638,738)	(190,295)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	20,464,709	21,043,203	1,076,528	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	3,711,155	3,711,155	185,925	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$ 89,287,920	\$ 100,944,468	\$ 5,703,819	

**TABLE VI
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS**

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	373,616,000	14,105,000	387,721,000
7/1/2003 to 6/30/2004	391,743,000	15,785,000	407,528,000
7/1/2004 to 6/30/2005	410,935,000	17,740,000	428,675,000
7/1/2005 to 6/30/2006	431,342,000	19,998,000	451,340,000
7/1/2006 to 6/30/2007	454,227,000	22,802,000	477,029,000
7/1/2007 to 6/30/2008	477,321,000	25,922,000	503,243,000
7/1/2008 to 6/30/2009	502,305,000	29,684,000	531,989,000
7/1/2009 to 6/30/2010	526,459,000	33,757,000	560,216,000
7/1/2010 to 6/30/2011	551,647,000	37,686,000	589,333,000
7/1/2011 to 6/30/2012	580,208,000	42,084,000	622,292,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	54,700,000	4,956,000	59,656,000
7/1/2003 to 6/30/2004	61,103,000	5,720,000	66,823,000
7/1/2004 to 6/30/2005	67,764,000	6,579,000	74,343,000
7/1/2005 to 6/30/2006	75,418,000	7,609,000	83,027,000
7/1/2006 to 6/30/2007	83,743,000	8,825,000	92,568,000
7/1/2007 to 6/30/2008	92,203,000	10,161,000	102,364,000
7/1/2008 to 6/30/2009	101,766,000	11,751,000	113,517,000
7/1/2009 to 6/30/2010	112,735,000	13,717,000	126,452,000
7/1/2010 to 6/30/2011	124,795,000	15,769,000	140,564,000
7/1/2011 to 6/30/2012	138,094,000	18,046,000	156,140,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

**TABLE VII
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002**

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		\$ 7,030,468,498
Actuarial Present Value of Future Member Contributions		1,032,236,660
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 922,165,736	
For Unfunded Actuarial Accrued Liability	(682,304,570)	
Total		\$ 239,861,166
Total Actuarial Assets		\$ 8,302,566,324
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 3,295,837,944	
Vested Retirement	40,675,738	
Vested Membership	15,877,985	
Total - Inactive		\$ 3,352,391,667
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	\$ 4,127,263,605	
Disability Benefits	346,886,069	
Withdrawal Benefits (Vested and Refund of Contributions)	225,330,993	
Survivor Benefits	250,693,990	
Total - Active		\$ 4,950,174,657
Refunds and Expenses Payable		\$ 0
Total Actuarial Liabilities		\$ 8,302,566,324
Notes		
* Values as of June 30, 2002		
Market value of assets:	Non-Hazardous	\$ 5,005,190,948
	Hazardous	\$ 301,799,829
	Total	\$ 5,306,990,777
Actuarial value of assets:		\$ 7,030,468,498
Member's Contribution Account:		\$ 988,657,330
** Present value of accrued benefit deferred to normal retirement date.		

**TABLE VIII
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002**

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		\$ 657,125,037
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 1,252,324,898	
For Unfunded Actuarial Accrued Liability	1,487,377,894	
Total		\$ 2,739,702,792
Total Actuarial Assets		\$ 3,396,827,829
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 930,166,206	
Vested Retirement	61,125,322	
Vested Membership	0	
Total - Inactive		\$ 991,291,528
Actuarial Present Value of Future Benefits		
Active Members:		\$ 2,405,536,301
Refunds and Expenses Payable		\$ 0
Total Actuarial Liabilities		\$ 3,396,827,829
Notes		
* Values as of June 30, 2002		
Market value of assets:		
Non-Hazardous		\$ 465,664,515
Hazardous		\$ 109,769,410
Total		\$ 575,433,925
Actuarial value of assets:		\$ 657,125,037

**TABLE IX
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2002
GASB DISCLOSURE INFORMATION**

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Inactive Members			
Retired Members	22,948	1,069	24,017
Beneficiaries	3,755	139	3,894
Vested Retirements	3,415	127	3,542
Vested Membership	14,299	946	15,245
Total Inactive Members	44,417	2,281	46,698
Active Members			
Vested Members	30,883	2,174	33,057
Nonvested Members	17,672	2,037	19,709
Total Active Members	48,555	4,211	52,766
Total Members	92,972	6,492	99,464

TABLE X
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2002
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

		Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS				
Contracts in Force - Retirees and Dependents				
(1) Single;	- 100% Paid	4,733	278	5,011
Pre-Medicare	- 75% Paid	217	33	250
	- 50% Paid	212	37	249
	- 25% Paid	100	9	109
	- 0% Paid	560	2	562
(2) Family;	- 100% Paid	453	69	522
Pre-Medicare	- 75% Paid	6	6	12
	- 50% Paid	4	8	12
	- 25% Paid	4	2	6
	- 0% Paid	1	0	1
(3) Parent +;	- 100% Paid	334	32	366
Pre-Medicare	- 75% Paid	4	16	20
	- 50% Paid	6	6	12
	- 25% Paid	1	3	4
	- 0% Paid	51	0	51
(4) Couple;	- 100% Paid	662	81	743
Pre-Medicare	- 75% Paid	25	5	30
	- 50% Paid	13	28	41
	- 25% Paid	11	6	17
	- 0% Paid	3	0	3
(5) Medicare Regular	- 100% Paid	734	46	780
	- 75% Paid	0	0	0
	- 50% Paid	0	0	0
	- 25% Paid	397	20	417
	- 0% Paid	707	0	707
(6) Medicare High Option	- 100% Paid	6,036	276	6,312
	- 75% Paid	1,632	69	1,701
	- 50% Paid	1,180	80	1,260
	- 25% Paid	577	26	603
	- 0% Paid	1,804	0	1,804
Vested Retirements		3,415	127	3,542
Vested Membership		14,299	946	15,245
Active Members		48,555	4,211	52,766
UNFUNDED MEDICAL BENEFIT OBLIGATION				
Medical Benefit Obligation				
Retirees, Beneficiaries and Vested Terminated Members		\$ 900,313,022	\$ 90,978,506	\$ 991,291,528
Active Members		1,007,370,859	145,840,544	1,153,211,403
Total Medical Benefit Obligation		\$ 1,907,683,881	\$ 236,819,050	\$ 2,144,502,931
Net Assets at Actuarial Value		\$ 521,250,455	\$ 135,874,582	\$ 657,125,037
Unfunded Medical Benefit Obligation		\$ 1,386,433,426	\$ 100,944,468	\$ 1,487,377,894
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method				

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from \$5,729,225,055 on June 30, 2001 to \$6,348,163,928 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from \$(1,477,191,106) to \$(682,304,570). Total actuarial value of assets as of June 30, 2002 was equal to \$7,030,468,498. The Unfunded Actuarial Accrued Liability increased from (89.60%) to (39.60%) as a percentage of annual payroll and increased from (25.8%) to (10.7%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from \$1,984,033,920 on June 30, 2001 to \$2,144,502,931 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from \$1,415,030,574 to \$1,487,377,894. Total actuarial value of assets as of June 30, 2002 was equal to \$657,125,037. The Unfunded Actuarial Accrued Liability decreased from 71.3% to 69.4% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

The change in contribution rate between the 2001 and 2002 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 2001 Contribution Rate	5.89%	18.84%
Change in Payment Percentage Due to Covered Payroll Experience	(0.01%)	(0.11%)
Investment Return Experience	1.56%	0.85%
Salary Increase Experience	0.10%	(0.10%)
Decrement Experience*	0.59%	0.01%
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(0.88%)	(0.80%)
> Increase in Long Term Funding Rate	0.00%	0.00%
Change in Administrative Expense Rate	(0.02%)	0.03%
Retiree COLA Effective 7/1/2001	0.30%	0.12%
Legislated Changes	None	None
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	N/A	N/A
June 30, 2002 Contribution Rate	7.53%	18.84%

* Includes mortality, disability, termination of employment and retirement experience.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees was determined at 2.86%. An additional 4.67% is required to fund medical insurance for retirees, bringing the required contribution up to 7.53%. This is greater than the current 5.89% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should be increased to the 7.53% level, and we so recommend.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees was determined at 7.37%. An additional 11.47% is required to fund medical insurance for retirees, bringing the required contribution up to 18.84%. This is the same as the current 18.84% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should remain at the 18.84% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2003 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets
1956	\$ 16,200,000	\$ 16,200,000	100.0%	\$ 0	\$ 0
1961	49,201,024	31,670,465	64.4%	17,530,559	4,479,508
1966	127,889,238	72,137,125	56.4%	55,752,113	9,085,814
1971	185,075,453	59,614,477	32.2%	125,460,976*	18,353,116
1975	296,343,758	77,434,549	26.1%	218,909,209*	26,529,526
1976	387,214,910	130,838,120	33.8%	256,376,790*	37,467,581
1977	446,255,236	149,511,331	33.5%	296,743,905*	40,367,115
1978	507,324,915	168,497,917	33.2%	338,826,998*	42,083,093
1979	592,095,113	202,676,662	34.2%	389,418,451*	50,591,453
1980	710,126,703	249,770,835	35.2%	460,355,868*	70,937,417
1981	692,160,395	164,735,129	23.8%	527,425,266	67,069,398
1982	810,250,589	195,803,691	24.2%	614,446,898	87,021,632
1983	862,291,959	152,196,081	17.7%	710,095,878	95,648,980
1984	1,016,088,830	201,535,007	19.8%	814,553,823	104,457,945
1985	1,104,429,988	169,949,215	15.4%	934,480,773	119,926,950
1986	1,245,083,143	166,635,243	13.4%	1,079,353,421	144,872,648
1987	1,384,259,808	120,259,389	8.7%	1,264,000,419	184,646,998
1988	1,561,743,738	135,687,336	8.7%	1,426,056,402	162,055,983
1989	1,734,607,903	145,998,805	8.4%	1,588,609,098	162,552,696
1990	2,055,489,412	256,167,674	12.5%	1,799,321,738	210,712,640
1991	2,288,611,147	375,396,216	16.4%	1,913,214,931	113,893,193
1992**	2,525,190,930	170,708,609	6.8%	2,354,482,321	441,267,390
1993	2,703,771,076	118,561,539	4.4%	2,585,209,537	230,727,216
1994	2,912,050,275	183,001,288	6.3%	2,729,048,987	143,839,450
1995	3,240,852,288	257,038,750	7.9%	2,983,813,538	244,764,551
1996	3,415,404,483	40,108,906	1.2%	3,375,295,577	391,482,039
1997	3,603,966,110	(246,746,133)	(6.8%)	3,850,712,243	475,416,666
1998	3,971,749,822	(596,537,421)	(15.0%)	4,568,287,243	717,575,000
1999	4,531,905,609	(992,274,107)	(21.9%)	5,524,179,716	955,892,473
2000	5,120,191,329	(2,022,697,595)	(39.5%)	7,142,888,924	1,618,709,208
2001***	5,729,229,055	(1,477,191,106)	(25.8%)	7,206,420,161	63,531,237
2002	6,348,163,928	(682,304,570)	(10.7%)	7,030,468,498	(175,951,663)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets
1990	\$ 719,493,806	\$ 686,770,874	95.5%	\$ 32,722,932	\$ N/A
1991	804,674,050	758,124,715	94.2%	46,549,335	13,826,403
1992	1,001,703,695	939,238,069	93.8%	62,465,626	15,916,291
1993	1,177,861,283	1,100,187,708	93.4%	77,673,575	15,207,949
1994	1,444,612,678	1,345,529,145	93.1%	99,083,533	21,409,958
1995	1,462,174,101	1,334,881,910	91.3%	127,292,191	28,208,658
1996**	1,222,394,138	1,049,747,933	85.9%	172,646,205	45,354,014
1997	1,274,464,242	1,063,299,895	83.4%	211,164,347	38,518,142
1998	1,379,578,155	1,114,866,185	80.8%	264,711,970	53,547,623
1999	1,422,523,386	1,064,238,850	74.8%	358,284,536	93,572,566
2000	1,632,642,971	1,130,870,482	69.3%	501,772,489	143,487,953
2001** *	1,984,033,920	1,415,030,574	71.3%	569,003,346	67,230,857
2002	2,144,502,931	1,487,377,894	69.4%	657,125,037	88,121,691
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Kentucky Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding policies adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A.

Date

Edward W. Maynard, F.S.A.

Date

Mercer Human Resource Consulting
462 South Fourth Street, Suite 1500
Louisville, Kentucky 40202-3415
☎(502) 561-4500

SECTION V
STATISTICAL DATA
AS OF
JUNE 30, 2002

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE GROUP	MALE			FEMALE			TOTAL		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	1,347	25,892,187	19,222	188	3,532,824	18,792	1,535	29,425,011	19,169
20-24	1,193	26,897,232	22,546	1,526	31,266,144	20,489	2,719	58,163,376	21,391
25-29	1,649	43,752,192	26,533	2,915	72,755,640	24,959	4,564	116,507,832	25,528
30-34	2,076	65,200,587	31,407	3,459	95,357,514	27,568	5,535	160,558,101	29,008
35-39	2,292	81,472,964	35,547	3,770	111,518,984	29,581	6,062	192,991,947	31,836
40-44	2,738	106,362,884	38,847	4,522	143,014,819	31,626	7,260	249,377,702	34,350
45-49	3,014	126,802,283	42,071	4,818	164,607,763	34,165	7,832	291,410,046	37,208
50-54	2,734	123,670,415	45,234	3,910	134,673,481	34,443	6,644	258,343,896	38,884
55-59	1,659	74,234,832	44,747	2,292	75,240,044	32,827	3,951	149,474,876	37,832
60-64	777	33,524,024	43,145	966	31,730,948	32,848	1,743	65,254,971	37,438
65-69	242	10,803,816	44,644	235	6,701,480	28,517	477	17,505,296	36,699
70-74	93	4,122,660	44,330	78	2,240,460	28,724	171	6,363,120	37,211
75+	33	1,217,148	36,883	29	854,640	29,470	62	2,071,788	33,416
TOTAL	19,847	723,953,224	36,477	28,708	873,494,739	30,427	48,555	1,597,447,963	32,900

EARNINGS BY SERVICE GROUPS

SERVICE GROUP	MALE			FEMALE			TOTAL		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	1,281	23,795,671	18,576	1,167	22,540,615	19,315	2,448	46,336,285	18,928
1	2,184	55,016,216	25,191	3,377	76,639,327	22,695	5,561	131,655,542	23,675
2	1,734	49,298,435	28,430	2,810	68,132,495	24,246	4,544	117,430,930	25,843
3	1,664	48,822,084	29,340	2,134	55,367,348	25,945	3,798	104,189,432	27,433
4	996	32,468,124	32,599	1,375	36,929,304	26,858	2,371	69,397,428	29,269
0-4	7,859	209,400,529	26,645	10,863	259,609,088	23,898	18,722	469,009,618	25,051
5-9	3,517	122,012,267	34,692	5,631	161,549,829	28,689	9,148	283,562,096	30,997
10-14	2,712	105,682,140	38,968	4,512	145,551,091	32,259	7,224	251,233,231	34,778
15-19	2,167	94,560,860	43,637	3,104	111,855,692	36,036	5,271	206,416,551	39,161
20-24	1,245	56,580,548	45,446	1,825	68,931,980	37,771	3,070	125,512,527	40,884
25-29	1,313	68,742,912	52,356	1,781	76,823,160	43,135	3,094	145,566,072	47,048
30-34	783	48,370,344	61,776	792	38,235,576	48,277	1,575	86,605,920	54,988
35-39	208	15,011,964	72,173	171	9,244,404	54,061	379	24,256,368	64,001
40+	43	3,591,660	83,527	29	1,693,920	58,411	72	5,285,580	73,411
TOTAL	19,847	723,953,224	36,477	28,708	873,494,739	30,427	48,555	1,597,447,963	32,900

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE GROUP	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	123	1,529,052	12,431	3	41,544	13,848	126	1,570,596	12,465
20-24	131	2,637,960	20,137	31	614,520	19,823	162	3,252,480	20,077
25-29	305	6,915,060	22,672	111	2,556,660	23,033	416	9,471,720	22,769
30-34	390	9,948,960	25,510	144	3,596,892	24,978	534	13,545,852	25,367
35-39	405	11,442,900	28,254	159	4,135,896	26,012	564	15,578,796	27,622
40-44	385	11,701,424	30,393	190	5,932,344	31,223	575	17,633,768	30,667
45-49	403	13,468,536	33,421	218	7,286,160	33,423	621	20,754,696	33,421
50-54	443	16,670,796	37,632	169	5,184,900	30,680	612	21,855,696	35,712
55-59	316	11,897,772	37,651	96	3,060,960	31,885	412	14,958,732	36,308
60-64	123	4,501,260	36,596	31	1,046,268	33,751	154	5,547,528	36,023
65-69	21	656,340	31,254	5	149,184	29,837	26	805,524	30,982
70-74	5	208,956	41,791	3	159,684	53,228	8	368,640	46,080
75+	0	0	0	1	27,576	27,576	1	27,576	27,576
TOTAL	3,050	91,579,016	30,026	1,161	33,792,588	29,106	4,211	125,371,604	29,772

EARNINGS BY SERVICE GROUPS

SERVICE GROUP	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	270	3,890,424	14,409	81	1,663,212	20,533	351	5,553,636	15,822
1	311	6,897,276	22,178	144	3,447,660	23,942	455	10,344,936	22,736
2	336	8,256,180	24,572	136	3,259,716	23,969	472	11,515,896	24,398
3	207	5,431,332	26,238	110	3,016,344	27,421	317	8,447,676	26,649
4	241	8,230,488	34,151	86	2,178,084	25,327	327	10,408,572	31,830
0-4	1,365	32,705,700	23,960	557	13,565,016	24,354	1,922	46,270,716	24,074
5-9	587	18,035,972	30,726	243	6,996,192	28,791	830	25,032,164	30,159
10-14	829	29,272,032	35,310	289	10,070,220	34,845	1,118	39,342,252	35,190
15-19	188	7,661,844	40,754	48	2,096,760	43,683	236	9,758,604	41,350
20-24	50	2,236,260	44,725	21	919,356	43,779	71	3,155,616	44,445
25-29	18	921,252	51,181	3	145,044	48,348	21	1,066,296	50,776
30-34	11	607,476	55,225	0	0	0	11	607,476	55,225
35-39	2	138,480	69,240	0	0	0	2	138,480	69,240
40+	0	0	0	0	0	0	0	0	0
TOTAL	3,050	91,579,016	30,026	1,161	33,792,588	29,106	4,211	125,371,604	29,772

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

<u>MALE</u>										
AGE	.....SERVICE GROUP.....									
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,336	5	3	1	1		1			1,347
20-24	1,059	134								1,193
25-29	1,243	383	23							1,649
30-34	1,020	665	349	42						2,076
35-39	731	537	563	411	50					2,292
40-44	733	443	487	550	360	165				2,738
45-49	660	454	431	424	370	476	199			3,014
50-54	553	404	360	338	245	382	360	92		2,734
55-59	331	284	259	212	124	185	163	84	17	1,659
60-64	126	146	146	132	70	80	44	22	11	777
65-69	41	38	63	36	16	17	12	8	11	242
70-74	19	17	23	18	7	4	2	1	2	93
75+	7	7	5	3	2	4	2	1	2	33
TOTAL	7,859	3,517	2,712	2,167	1,245	1,313	783	208	43	19,847

<u>FEMALE</u>										
AGE	.....SERVICE GROUP.....									
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	182	3	2	1						188
20-24	1,450	75			1					1,526
25-29	2,198	659	58							2,915
30-34	1,694	1,107	577	81						3,459
35-39	1,406	867	882	542	72	1				3,770
40-44	1,365	932	763	658	547	256	1			4,522
45-49	1,143	816	784	616	477	699	283			4,818
50-54	823	611	724	590	338	429	319	76		3,910
55-59	426	360	442	368	235	257	127	71	6	2,292
60-64	130	146	196	196	112	108	46	14	18	966
65-69	31	38	67	36	30	15	11	5	2	235
70-74	10	15	10	15	8	10	4	4	2	78
75+	5	2	7	1	5	6	1	1	1	29
TOTAL	10,863	5,631	4,512	3,104	1,825	1,781	792	171	29	28,708

<u>TOTAL</u>										
AGE	.....SERVICE GROUP.....									
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1,518	8	5	2	1		1			1,535
20-24	2,509	209			1					2,719
25-29	3,441	1,042	81							4,564
30-34	2,714	1,772	926	123						5,535
35-39	2,137	1,404	1,445	953	122	1				6,062
40-44	2,098	1,375	1,250	1,208	907	421	1			7,260
45-49	1,803	1,270	1,215	1,040	847	1,175	482			7,832
50-54	1,376	1,015	1,084	928	583	811	679	168		6,644
55-59	757	644	701	580	359	442	290	155	23	3,951
60-64	256	292	342	328	182	188	90	36	29	1,743
65-69	72	76	130	72	46	32	23	13	13	477
70-74	29	32	33	33	15	14	6	5	4	171
75+	12	9	12	4	7	10	3	2	3	62
TOTAL	18,722	9,148	7,224	5,271	3,070	3,094	1,575	379	72	48,555

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE										
AGE	SERVICE GROUP									TOTAL
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	122		1							123
20-24	127	4								131
25-29	251	53	1							305
30-34	221	138	31							390
35-39	152	104	127	22						405
40-44	143	68	131	35	8					385
45-49	127	71	152	34	17	1	1			403
50-54	115	64	178	54	19	10	3			443
55-59	71	53	145	33	5	3	6			316
60-64	31	27	50	8		4	1	2		123
65-69	4	5	11		1					21
70-74	1		2	2						5
75+										0
TOTAL	1,365	587	829	188	50	18	11	2	0	3,050

FEMALE										
AGE	SERVICE GROUP									TOTAL
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	3									3
20-24	31									31
25-29	93	18								111
30-34	99	31	14							144
35-39	74	36	46	3						159
40-44	75	39	49	17	9	1				190
45-49	77	60	53	16	10	2				218
50-54	64	34	61	8	2					169
55-59	33	18	41	4						96
60-64	4	6	21							31
65-69	3	1	1							5
70-74			3							3
75+	1									1
TOTAL	557	243	289	48	21	3	0	0	0	1,161

TOTAL										
AGE	SERVICE GROUP									TOTAL
GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	125		1							126
20-24	158	4								162
25-29	344	71	1							416
30-34	320	169	45							534
35-39	226	140	173	25						564
40-44	218	107	180	52	17	1				575
45-49	204	131	205	50	27	3	1			621
50-54	179	98	239	62	21	10	3			612
55-59	104	71	186	37	5	3	6			412
60-64	35	33	71	8		4	1	2		154
65-69	7	6	12		1					26
70-74	1		5	2						8
75+	1									1
TOTAL	1,922	830	1,118	236	71	21	11	2	0	4,211

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP										TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
0-19	1,518	8	5	2	1		1				1,535
	18,843	35,018	62,686	43,872	62,352		77,928				19,169
20-24	2,509	209			1						2,719
	21,015	25,761			52,572						21,391
25-29	3,441	1,042	81								4,564
	24,837	27,440	30,252								25,528
30-34	2,714	1,772	926	123							5,535
	25,968	31,033	33,068	36,330							29,008
35-39	2,137	1,404	1,445	953	122	1					6,062
	25,977	32,352	35,117	38,518	37,477	33,744					31,836
40-44	2,098	1,375	1,250	1,208	907	421	1				7,260
	26,764	31,018	36,154	41,265	40,296	45,037	28,020				34,350
45-49	1,803	1,270	1,215	1,040	847	1,175	482				7,832
	27,345	31,856	35,450	39,661	43,080	47,316	52,377				37,208
50-54	1,376	1,015	1,084	928	583	811	679	168			6,644
	28,610	32,034	34,355	38,479	42,156	48,856	56,959	63,323			38,884
55-59	757	644	701	580	359	442	290	155	23		3,951
	27,938	31,213	34,166	38,625	38,554	45,302	55,640	64,794	79,525		37,832
60-64	256	292	342	328	182	188	90	36	29		1,743
	28,212	32,808	34,738	36,830	36,791	46,486	52,860	67,180	64,855		37,438
65-69	72	76	130	72	46	32	23	13	13		477
	27,510	30,518	32,486	35,637	38,000	49,274	58,189	56,829	78,030		36,699
70-74	29	32	33	33	15	14	6	5	4		171
	23,570	31,950	36,389	36,403	49,630	43,921	41,132	59,851	87,426		37,211
75+	12	9	12	4	7	10	3	2	3		62
	30,699	27,656	28,736	24,390	26,081	39,815	33,752	59,250	70,544		33,416
TOTAL	18,722	9,148	7,224	5,271	3,070	3,094	1,575	379	72		48,555
	25,051	30,997	34,778	39,161	40,884	47,048	54,988	64,001	73,411		32,900

TOTAL EARNINGS 1,597,447,963
 AVERAGE AGE 41.46
 AVERAGE SERVICE 10.10

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP									TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	125 12,091		1 59,232							126 12,465
20-24	158 19,899	4 27,108								162 20,077
25-29	344 22,111	71 25,855	1 29,976							416 22,769
30-34	320 23,504	169 27,377	45 31,062							534 25,367
35-39	226 23,260	140 29,558	173 31,193	25 31,499						564 27,622
40-44	218 25,528	107 29,037	180 34,326	52 39,414	17 39,631	1 59,676				575 30,667
45-49	204 28,348	131 31,459	205 35,311	50 44,721	27 45,121	3 39,420	1 39,276			621 33,421
50-54	179 30,539	98 33,519	239 36,906	62 42,149	21 46,885	10 51,536	3 56,876			612 35,712
55-59	104 30,388	71 36,068	186 37,053	37 43,499	5 45,708	3 55,156	6 57,046			412 36,308
60-64	35 29,326	33 33,112	71 36,903	8 50,879		4 51,882	1 55,296	2 69,240		154 36,023
65-69	7 23,772	6 26,116	12 35,995		1 50,484					26 30,982
70-74	1 35,760		5 55,402	2 27,936						8 46,080
75+	1 27,576									1 27,576
TOTAL	1,922 24,074	830 30,159	1,118 35,190	236 41,350	71 44,445	21 50,776	11 55,225	2 69,240	0	4,211 29,772

TOTAL EARNINGS 125,371,604
AVERAGE AGE 41.76
AVERAGE SERVICE 6.90

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
 TABULATION BY MONTHLY SALARY - JUNE 30, 2002

<u>MONTHLY SALARY</u>	<u>NUMBER OF MEMBERS</u>		
	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>
UNDER \$ 500	117	72	189
\$ 500 - \$ 749	137	94	231
\$ 750 - \$ 999	237	313	550
\$ 1,000 - \$ 1,249	589	1,223	1,812
\$ 1,250 - \$ 1,499	1,358	2,424	3,782
\$ 1,500 - \$ 1,749	1,915	3,258	5,173
\$ 1,750 - \$ 1,999	1,779	3,141	4,920
\$ 2,000 - \$ 2,249	1,572	3,091	4,663
\$ 2,250 - \$ 2,499	1,482	2,987	4,469
\$ 2,500 - \$ 2,749	1,516	2,578	4,094
\$ 2,750 - \$ 2,999	1,307	2,034	3,341
\$ 3,000 - \$ 3,499	2,089	2,883	4,972
\$ 3,500 - \$ 3,999	1,437	1,791	3,228
\$ 4,000 - \$ 4,499	1,130	1,120	2,250
\$ 4,500 - \$ 4,999	862	666	1,528
\$ 5,000 - \$ 5,499	596	406	1,002
\$ 5,500 - \$ 5,999	470	245	715
\$ 6,000 - \$ 6,499	359	144	503
\$ 6,500 - \$ 6,999	245	67	312
\$ 7,000 - \$ 7,499	192	51	243
\$ 7,500 - \$ 7,999	101	27	128
\$ 8,000 - \$ 8,499	122	23	145
\$ 8,500 - \$ 8,999	50	17	67
\$ 9,000 - \$ 9,499	46	16	62
\$ 9,500 - \$ 9,999	29	7	36
\$ 10,000 AND OVER	110	30	140
TOTAL	19,847	28,708	48,555
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	625	162	787

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
 TABULATION BY MONTHLY SALARY - JUNE 30, 2002

<u>MONTHLY SALARY</u>	<u>NUMBER OF MEMBERS</u>		
	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>
UNDER \$ 500	48	4	52
\$ 500 - \$ 749	6	2	8
\$ 750 - \$ 999	37	10	47
\$ 1,000 - \$ 1,249	50	12	62
\$ 1,250 - \$ 1,499	95	49	144
\$ 1,500 - \$ 1,749	460	206	666
\$ 1,750 - \$ 1,999	364	171	535
\$ 2,000 - \$ 2,249	413	171	584
\$ 2,250 - \$ 2,499	380	127	507
\$ 2,500 - \$ 2,749	267	80	347
\$ 2,750 - \$ 2,999	247	79	326
\$ 3,000 - \$ 3,499	292	112	404
\$ 3,500 - \$ 3,999	150	69	219
\$ 4,000 - \$ 4,499	84	33	117
\$ 4,500 - \$ 4,999	64	14	78
\$ 5,000 - \$ 5,499	34	11	45
\$ 5,500 - \$ 5,999	15	5	20
\$ 6,000 - \$ 6,499	16	1	17
\$ 6,500 - \$ 6,999	7	3	10
\$ 7,000 - \$ 7,499	4	0	4
\$ 7,500 - \$ 7,999	4	0	4
\$ 8,000 - \$ 8,499	1	0	1
\$ 8,500 - \$ 8,999	0	0	0
\$ 9,000 - \$ 9,499	1	0	1
\$ 9,500 - \$ 9,999	1	0	1
\$ 10,000 AND OVER	10	2	12
TOTAL	3,050	1,161	4,211
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	20	2	22

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

<u>MEMBERS CURRENTLY ACTIVE IN KERS NONHAZARDOUS</u>			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - HAZARDOUS	0	371	371
CERS - NONHAZARDOUS	482	2,618	3,100
CERS - HAZARDOUS	20	81	101
STATE POLICE	3	14	17
TOTAL - ALL SYSTEMS	505	3,084	3,589

<u>MEMBERS CURRENTLY NOT ACTIVE IN KERS NONHAZARDOUS</u>			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - HAZARDOUS	1,496	53	1,549
CERS - NONHAZARDOUS	2,138	203	2,341
CERS - HAZARDOUS	290	33	323
STATE POLICE	112	13	125
TOTAL - ALL SYSTEMS	4,036	302	4,338

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN KERS HAZARDOUS

<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	0	1,496	1,496
CERS - NONHAZARDOUS	23	230	253
CERS - HAZARDOUS	11	45	56
STATE POLICE	0	10	10
TOTAL - ALL SYSTEMS	34	1,781	1,815

MEMBERS CURRENTLY NOT ACTIVE IN KERS HAZARDOUS

<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	371	53	424
CERS - NONHAZARDOUS	64	75	139
CERS - HAZARDOUS	109	6	115
STATE POLICE	24	1	25
TOTAL - ALL SYSTEMS	568	135	703

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	2,530	2,780,084.56	6,343	5,812,065.71	8,873	8,592,150.27
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	1,704	1,826,880.37	563	393,064.72	2,267	2,219,945.09
66-2/3% TO BENEFICIARY	707	1,232,278.81	199	283,036.86	906	1,515,315.67
50% TO BENEFICIARY	900	1,359,425.72	629	908,095.96	1,529	2,267,521.68
POP-UP OPTION	1,810	2,855,099.17	1,085	1,487,480.37	2,895	4,342,579.54
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	1,094	965,975.80	1,552	1,455,325.03	2,646	2,421,300.83
SOCIAL SECURITY OPTION						
OPTION C	404	694,267.54	886	1,213,703.27	1,290	1,907,970.81
OPTION D	814	1,272,500.92	470	656,794.44	1,284	1,929,295.36
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	483.07	2	678.25	3	1,161.32
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	367	420,253.82	325	340,406.04	692	760,659.86
20 YEARS CERTAIN & LIFE	287	401,777.21	276	358,062.19	563	759,839.40
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	10,618	13,809,026.99	12,330	12,908,712.84	22,948	26,717,739.83

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	169	127,654.98	113	67,282.37	282	194,937.35
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	114	91,892.11	5	3,913.61	119	95,805.72
66-2/3% TO BENEFICIARY	39	30,845.77	7	6,941.39	46	37,787.16
50% TO BENEFICIARY	56	54,033.87	6	3,704.37	62	57,738.24
POP-UP OPTION	196	177,839.26	32	23,296.24	228	201,135.50
10 YEARS CERTAIN	17	13,313.01	5	3,253.96	22	16,566.97
10 YEARS CERTAIN & LIFE	67	41,847.26	32	18,030.12	99	59,877.38
SOCIAL SECURITY OPTION						
OPTION C	31	27,315.58	17	11,801.95	48	39,117.53
OPTION D	74	78,746.89	11	4,782.09	85	83,528.98
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	7	1,668.06	11	2,422.69	18	4,090.75
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	23	17,794.80	9	6,841.53	32	24,636.33
20 YEARS CERTAIN & LIFE	26	22,966.24	2	1,266.34	28	24,232.58
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	819	685,917.83	250	153,536.66	1,069	839,454.49

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	253	150,660.82	1,677	1,003,027.27	1,930	1,153,688.09
66-2/3% TO BENEFICIARY	16	8,298.58	267	148,590.33	283	156,888.91
50% TO BENEFICIARY	58	24,082.96	483	180,625.88	541	204,708.84
POP-UP OPTION	45	47,567.64	173	129,832.27	218	177,399.91
10 YEARS CERTAIN	73	60,773.00	61	53,639.19	134	114,412.19
10 YEARS CERTAIN & LIFE	61	42,958.38	84	76,292.52	145	119,250.90
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	21	20,080.49	143	171,246.57	164	191,327.06
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	16	5,582.18	16	5,582.18
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	28	25,069.07	102	85,610.58	130	110,679.65
20 YEARS CERTAIN & LIFE	32	28,417.68	53	50,730.66	85	79,148.34
5 YEARS ONLY	66	54,558.40	43	62,263.59	109	116,821.99
TOTAL	653	462,467.02	3,102	1,967,441.04	3,755	2,429,908.06

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	5	1,656.00	61	36,545.78	66	38,201.78
66-2/3% TO BENEFICIARY	0	0.00	3	1,629.50	3	1,629.50
50% TO BENEFICIARY	0	0.00	10	2,837.58	10	2,837.58
POP-UP OPTION	0	0.00	12	5,971.06	12	5,971.06
10 YEARS CERTAIN	5	2,996.69	6	2,787.41	11	5,784.10
10 YEARS CERTAIN & LIFE	2	2,087.09	8	1,964.59	10	4,051.68
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	17.70	7	6,694.11	8	6,711.81
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	2	582.30	0	0.00	2	582.30
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	2	670.29	0	0.00	2	670.29
20 YEARS CERTAIN & LIFE	0	0.00	4	939.53	4	939.53
5 YEARS ONLY	8	1,974.77	3	4,462.40	11	6,437.17
TOTAL	25	9,984.84	114	63,831.96	139	73,816.80

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	4	733.77	1	90.87	5	824.64
25-29	22	3,711.73	40	7,075.50	62	10,787.23
30-34	85	22,033.79	225	53,224.51	310	75,258.30
35-39	153	48,192.71	370	106,890.17	523	155,082.88
40-44	174	67,343.68	364	124,868.37	538	192,212.05
45-49	208	91,353.85	476	179,511.30	684	270,865.15
50-54	253	132,686.48	455	178,667.16	708	311,353.64
55-59	155	88,764.41	235	75,934.63	390	164,699.04
60-64	53	29,950.24	93	28,139.22	146	58,089.46
65-69	13	3,231.90	17	3,596.65	30	6,828.55
70-74	3	583.61	9	1,457.37	12	2,040.98
75-79	1	67.72	3	1,005.20	4	1,072.92
80-84	1	114.18	2	106.83	3	221.01
85 +	0	0.00	0	0.00	0	0.00
TOTAL	1,125	488,768.07	2,290	760,567.78	3,415	1,249,335.85

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	5	1,016.71	1	132.12	6	1,148.83
30-34	8	1,730.46	5	1,090.63	13	2,821.09
35-39	15	4,469.53	12	3,359.26	27	7,828.79
40-44	13	5,706.97	9	3,794.20	22	9,501.17
45-49	17	5,296.12	5	537.79	22	5,833.91
50-54	14	6,171.46	6	1,928.56	20	8,100.02
55-59	9	2,162.09	7	1,773.25	16	3,935.34
60-64	1	292.80	0	0.00	1	292.80
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	82	26,846.14	45	12,615.81	127	39,461.95

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS
15-19	1,211	238,131.21	72	19,486.24	1,283	257,617.45
20-24	419	428,718.54	402	187,622.56	821	616,341.10
25-29	658	497,809.88	1,216	1,123,856.98	1,874	1,621,666.86
30-34	818	857,902.54	1,438	1,774,906.29	2,256	2,632,808.83
35-39	633	660,897.57	1,094	1,379,686.35	1,727	2,040,583.92
40-44	557	698,766.80	979	1,220,097.57	1,536	1,918,864.37
45-49	598	820,401.13	994	1,524,092.32	1,592	2,344,493.45
50-54	607	989,361.35	805	1,656,608.67	1,412	2,645,970.02
55-59	364	659,418.34	540	1,141,646.63	904	1,801,064.97
60-64	211	504,979.67	266	389,859.88	477	894,839.55
65-69	119	187,397.36	106	185,516.33	225	372,913.69
70-74	63	54,101.51	46	27,828.25	109	81,929.76
75-79	29	11,496.23	25	11,198.81	54	22,695.04
80-84	9	5,113.18	11	3,695.13	20	8,808.31
85 +	5	153.47	4	20,937.48	9	21,090.95
TOTAL	6,301	6,614,648.78	7,998	10,667,039.49	14,299	17,281,688.27

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS
15-19	113	21,929.20	0	0.00	113	21,929.20
20-24	41	37,002.31	12	4,680.04	53	41,682.35
25-29	124	85,526.36	39	47,691.49	163	133,217.85
30-34	137	128,913.18	42	46,707.93	179	175,621.11
35-39	92	89,765.91	42	67,349.05	134	157,114.96
40-44	58	53,445.89	42	65,224.94	100	118,670.83
45-49	47	34,174.94	25	47,489.86	72	81,664.80
50-54	46	73,909.87	23	42,586.43	69	116,496.30
55-59	23	31,873.74	16	27,279.13	39	59,152.87
60-64	17	17,087.27	5	13,354.53	22	30,441.80
65-69	2	1,388.97	0	0.00	2	1,388.97
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	700	575,017.64	246	362,363.40	946	937,381.04

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the Kentucky Employees Retirement System in July, 1956. The plan benefits have been improved several times, most recently as of August 1, 2002.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

- (a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1956. In some instances prior service credit is granted for time spent in the military.
- (b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1956. Current service credit may be granted for military service and educational leaves if special criteria are met.
- (c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

Any state department, board, or agency shall participate in the System when directed to do so by the Executive Order of the Governor. Membership in the system consists of:

- (a) all persons who become employees of a department after such department first participates,

- (b) all persons who are employees on the date a department first participates and who elect within thirty days to become members and make contributions,
- (c) all persons who are employees of any credit union whose membership is limited to state government employees,
- (d) all persons who were professional staff employees of the Council on Public Higher Education or the Higher Education Assistance Authority and were making contributions to the system on the effective date of their respective Executive Order and filed a written election to continue in the System,
- (e) all persons who were professional staff employees of the Kentucky Authority for Educational Television on or after July 1, 1974,
- (f) members of the General Assembly and Constitutional officers of the General Assembly serving during the January, 1960 session or thereafter, and
- (g) officers and employees of the General Assembly and their assistants if employed by the General Assembly during the January, 1960 session and thereafter, but only after serving during six sessions of the General Assembly.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 1.97% of the member's final compensation multiplied by his service will be payable. However, effective February 1, 1999, a member who was participating as of January 1, 1998 and continues to participate through January 1, 1999 shall receive a benefit based on a 2.00% formula rate. In addition, any such member whose effective date of retirement is between February 1, 1999 and January 31, 2009, and who has at least 20 years of service credit, shall receive a retirement allowance based on a 2.20% benefit formula rate. For hazardous positions, a monthly benefit equal to 2.49% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Minimum Benefit

The normal retirement benefit for members with 10 or more years of service, at least one of which is current service, shall not be less than \$512 per year.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service credit, additional years of service credit will be added up to a maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a \$5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of \$10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.49% rather than 1.97%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of \$5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-THIRD ANNUAL ACTUARIAL VALUATION

JUNE 30, 2002

COUNTY EMPLOYEES RETIREMENT SYSTEM

SECTION I

INTRODUCTION

The results of the forty-third annual actuarial valuation of the County Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2002.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new

medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased each year by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement). The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND		INSURANCE FUND	
	Non Hazardous	Hazardous	Non Hazardous	Hazardous
June 30, 2001 Valuation Assets	5,423,834,549	1,486,666,016	371,758,628	197,875,249
Cash Flows				
> Employer Contributions	4,663,371	10,904,214	102,150,788	45,730,333
> Member Contributions	121,573,670	35,164,272		
> Retirement Benefits	196,658,618	63,494,374		
> Net Refunds	7,520,556	1,641,709		
> Insurance Premiums			32,694,301	13,095,137
> Administrative Expenses	7,187,049	634,783	260,214	115,183
> Investment Manager Fees	2,842,513	748,070	141,757	72,119
Valuation Interest Assumption	8.25%	8.25%	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	443,837,518	121,806,365	33,518,586	17,663,184
Expected Valuation Assets	5,779,700,372	1,588,021,931	474,331,730	247,986,327
Actual Market Value of Assets	4,126,756,301	1,144,349,093	365,332,585	187,533,847
Investment Gain/(Loss)	(1,652,944,071)	(443,672,838)	(108,999,145)	(60,452,480)
Valuations				
> Valuation Year - 1				
>> Initial Amount	(1,283,110,002)	(344,389,248)	(50,864,852)	(30,298,823)
>> Current Valuation Amount	(1,026,488,002)	(275,511,398)	(40,691,882)	(24,239,058)
>> Amortization	(256,622,000)	(68,877,850)	(10,172,970)	(6,059,765)
> Valuation Year - 2				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 3				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
> Valuation Year - 4				
>> Initial Amount	N/A	N/A	N/A	N/A
>> Current Valuation Amount	N/A	N/A	N/A	N/A
>> Amortization	N/A	N/A	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	(1,026,488,002)	(275,511,398)	(40,691,882)	(24,239,058)
Investment Gain/(Loss) to be Amortized from Current Valuation Date				
> Amount	(626,456,069)	(168,161,440)	(68,307,263)	(36,213,422)
> Amortization	(125,291,214)	(33,632,288)	(13,661,453)	(7,242,684)
June 30, 2002 Valuation Assets				
> Expected Assets	5,779,700,372	1,588,021,931	474,331,730	247,986,327
> Amortization Amounts	(381,913,214)	(102,510,138)	(23,834,423)	(13,302,449)
> Valuation Assets	5,397,787,158	1,485,511,793	450,497,307	234,683,878

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

- (1) Mortality:
 - (a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.
 - (b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).
- (2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).
- (3) Termination of employment - Graduated select (non-hazardous only) and ultimate rates based on 2000 experience study.
- (4) Retirement - Non-Hazardous:

<u>Age</u>	<u>Retirement Rate</u>
55-57	.04
58-59	.05
60-61	.06
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 and Over	1.00

At age 55-64 in lieu of the age related rate, 25% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.

- (5) Marital status
 - (a) Percentage married - 100%.
 - (b) Age difference - Males are assumed to be 3 years older than their spouses.
- (6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children each age 6.
- (7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.
- (8) Compensation progression - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.
- (9) Underlying Inflation Rate - 3.5% per year; reflected in investment return and compensation progression assumptions.
- (10) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Pre-Medicare Coverage - - -
Rate in Effect on Valuation Date

	<u>Single</u>	<u>Couple</u>	<u>Parent Plus</u>	<u>Family</u>
Region 1	\$234.00	\$473.96	\$315.96	\$526.60
Region 2	260.44	527.44	351.60	586.04
Region 3	300.64	608.96	405.96	676.60
Region 4	320.96	650.00	433.32	722.24
Region 5	340.48	689.44	459.64	766.04
All others	245.00	522.92	348.64	581.04

Region 1: Boone, Campbell, Gallatin, Grant, Kenton and Pendleton

Region 2: Allen, Ballard, Bell, Caldwell, Calloway, Carlisle, Clay, Crittenden, Fulton, Graves, Harlan, Harrison, Hickman, Hopkins, Knott, Lincoln, Livingston, Lyon, McCracken, Marshall, Perry, Pike, Robertson, Rockcastle, Rowan, Simpson and Webster

Region 3: Lewis, Mason, Morgan and Pulaski

Region 4: Boyd, Carter, Christian, Daviess, Elliott, Greenup, Hancock, Henderson, Lawrence, McLean, Todd, Trigg and Union

Region 5: Breckinridge and Grayson

<u>Carrier</u>	<u>Medicare Rate</u>		<u>Contracts in Force</u>	
	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
	<u>Option</u>	<u>Option</u>	<u>Option</u>	<u>Option</u>
Anthem BC/BS	103.18	252.56	3,258	20,040
Bankers Life	82.70	195.35	594	331
Option 2000	98.18	247.56	547	1,852

Weighted Medicare Coverage - - -
Rate in Effect on Valuation Date

	<u>Low</u>	<u>High</u>
	<u>Option</u>	<u>Option</u>
All members	\$99.79	\$251.29

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

<u>Years</u>	<u>Medical Increase</u>
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:
 - . If reported salary was zero or blank, then monthly salary was assumed to be \$911.64
 - . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:
 - . Service under all systems is aggregated for purposes of determining benefit eligibility.
 - . Future service is projected only under the system in which the member is currently active.
 - . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
 - . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

<u>Age</u>	<u>Active Mortality</u>		<u>Disabled Mortality</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

<u>Age</u>	<u>Disablement</u>	<u>Ultimate Termination</u>
25	0.033%	2.40%
30	0.039%	2.40%
40	0.105%	2.00%
50	0.423%	1.60%
55	0.794%	1.20%
60	1.395%	0.20%

(3) Select Rates of Termination:

<u>Years of Service</u>	<u>Select Termination</u>
1	35.0%
2	10.0%
3	7.0%
4	5.0%
5	4.0%

(4) Compensation Progression (after 1st 3 years):

<u>Age</u>	<u>Rate of Annual Increase</u>	<u>Compensation at Normal Retirement as Percentage Of Current Annual Compensation</u>
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees are included in the State Police Retirement System valuation.

SECTION III

RESULTS OF THE 2002 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the participating Agencies required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the annual Normal Cost, medical insurance and the administrative costs of the System is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated payroll of the participating Agencies as of June 30, 2002.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2002 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate of the participating Agencies is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the County Employees Retirement System as of June 30, 2002 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2002

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND		
		Percent *
Total Actuarial Accrued Liability	\$ 5,492,646,422	269.94%
Assets at Actuarial Value	6,883,298,951	338.28%
Unfunded Actuarial Accrued Liability	\$ (1,390,652,529)	(68.34%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	\$ (75,636,941)	(3.72%)
NORMAL COST - RETIREMENT FUND		
Retirement Benefits	\$ 192,289,479	9.45%
Disability Benefits	21,520,895	1.06%
Withdrawal Benefits (Vested and Refund of Contributions)	14,772,987	0.73%
Survivor Benefits	11,541,944	0.57%
Total Normal Cost	\$ 240,125,305	11.81%
Less: Employee Contributions	109,975,311	5.40%
Normal Cost - State	\$ 130,149,994	6.41%
TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND		
Non-Hazardous Duty Cost		
Normal Cost	\$ 99,975,323	5.92% **
Payment on Unfunded Actuarial Accrued Liability	(68,112,351)	(4.03%) **
Administrative Expense	8,508,924	0.50% **
Subtotal - Retirement Fund (Not Less Than Zero)	\$ 40,371,896	2.39% **
Group Hospital and Medical Insurance Premiums	83,578,809	4.95% **
Total Annual Cost	\$ 123,950,705	7.34% **
Hazardous Duty Cost		
Normal Cost	\$ 30,174,671	8.71% ***
Payment on Unfunded Actuarial Accrued Liability	(7,524,590)	(2.17%) ***
Administrative Expense	749,025	0.22% ***
Subtotal - Retirement Fund (Not Less Than Zero)	\$ 23,399,106	6.76% ***
Group Hospital and Medical Insurance Premiums	40,692,500	11.75% ***
Total Annual Cost	\$ 64,091,606	18.51% ***
Based on estimated annual salaries		
* Total	\$ 2,034,779,935	
** Non-Hazardous Position Employees	\$ 1,688,460,789	
*** Hazardous Position Employees	\$ 346,319,146	

TABLE II
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2002

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	\$ 1,981,355,918	\$ 625,350,420	\$ 2,606,706,338
Disability Benefits	139,143,952	14,674,137	153,818,089
Withdrawal Benefits (Vested and Refund of Contributions)	63,036,065	8,390,929	71,426,994
Survivor Benefits	120,399,697	14,686,925	135,086,622
Total - Actives	\$ 2,303,935,632	\$ 663,102,411	\$ 2,967,038,043
Inactive Members			
Retired Members and Beneficiaries	\$ 1,806,732,142	\$ 660,258,433	\$ 2,466,990,575
Vested Retirement	37,094,732	2,935,600	40,030,332
Vested Membership	17,592,643	994,829	18,587,472
Total - Inactives	\$ 1,861,419,517	\$ 664,188,862	\$ 2,525,608,379
Total Actuarial Accrued Liability	\$ 4,165,355,149	\$ 1,327,291,273	\$ 5,492,646,422
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	\$ 4,165,355,149	\$ 1,327,291,273	\$ 5,492,646,422
Less Actuarial Value of Assets	5,397,787,158	1,485,511,793	6,883,298,951
Unfunded Actuarial Accrued Liability	\$ (1,232,432,009)	\$ (158,220,520)	\$ (1,390,652,529)
NORMAL COST			
Retirement Benefits	\$ 142,794,586	\$ 49,494,893	\$ 192,289,479
Disability Benefits	19,177,403	2,343,492	21,520,895
Withdrawal Benefits (Vested and Refund of Contributions)	11,866,751	2,906,236	14,772,987
Survivor Benefits	9,813,545	1,728,399	11,541,944
Total Normal Cost	\$ 183,652,285	\$ 56,473,020	\$ 240,125,305
Less Employee Contributions	83,676,962	26,298,349	109,975,311
Total Normal Cost - State	\$ 99,975,323	\$ 30,174,671	\$ 130,149,994

TABLE III
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
Non-Hazardous Position Employees				
6/30/1990	\$ 93,672,421	\$ 117,926,234	\$ 8,384,084	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	61,472,822	76,799,816	5,244,736	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(125,111,651)	(154,695,878)	(10,174,967)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation method change
6/30/1993	(28,358,370)	(34,618,487)	(2,198,412)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	59,026,195	70,983,744	4,361,667	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	(35,766,009)	(42,286,466)	(2,519,174)	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(188,502,047)	(218,710,689)	(12,655,475)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(200,122,489)	(227,293,278)	(12,795,930)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(311,976,854)	(346,327,663)	(18,998,150)	Experience gains/losses for 7/1/1997 to 6/30/1998; Increase in death benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(379,088,077)	(410,741,268)	(21,985,337)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(804,685,873)	(849,873,782)	(44,445,849)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	250,075,433	257,144,523	13,155,000	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000; 3-year average earnings window
6/30/2002	529,261,185	529,261,185	26,515,456	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	\$ (1,080,103,314)	\$ (1,232,432,009)	\$ (68,112,351)	

TABLE III (Continued)
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
Hazardous Position Employees				
6/30/1990	\$ 68,584,978	\$ 86,343,114	\$ 6,138,650	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	29,934,803	37,398,436	2,553,977	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(12,941,304)	(16,001,438)	(1,052,479)	Experience gains/losses for 7/1/1991 to 6/30/1992; Asset valuation method change
6/30/1993	(7,291,213)	(8,900,748)	(565,233)	Experience gains/losses for 7/1/1992 to 6/30/1993
6/30/1994	1,854,577	2,230,279	137,042	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's
6/30/1995	24,831,672	29,358,703	1,749,015	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(65,565,268)	(76,072,515)	(4,401,860)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions; Correction of pension allocation for members in pay status with both non-hazardous and hazardous service in KERS
6/30/1997	(62,908,989)	(71,450,194)	(4,022,432)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	(50,329,820)	(55,871,482)	(3,064,886)	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(97,060,446)	(105,164,824)	(5,629,052)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(194,399,700)	(205,316,402)	(10,737,432)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	79,413,115	81,657,951	4,177,457	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
6/30/2002	143,568,600	143,568,600	7,192,643	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001
Total	\$ (142,308,995)	\$ (158,220,520)	\$ (7,524,590)	

**TABLE IV
COUNTY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2002**

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members	\$ 1,320,764,138	\$ 437,363,297	\$ 1,758,127,435
Inactive Members			
Retired Members	\$ 591,973,204	\$ 303,932,683	\$ 895,905,887
Beneficiaries	127,079	34,990,269	35,117,348
Vested Retirement	64,712,617	4,898,725	69,611,342
Vested Membership	0	0	0
Total - Inactives	\$ 656,812,900	\$ 343,821,677	\$ 1,000,634,577
Total Actuarial Accrued Liability	\$ 1,977,577,038	\$ 781,184,974	\$ 2,758,762,012
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	\$ 1,977,577,038	\$ 781,184,974	\$ 2,758,762,012
Less Actuarial Value of Assets	450,497,307	234,683,878	685,181,185
Unfunded Actuarial Accrued Liability	\$ 1,527,079,731	\$ 546,501,096	\$ 2,073,580,827
NORMAL COST			
Gross Normal Cost	\$ 140,324,978	\$ 50,974,605	\$ 191,299,583
Less Employee Contributions	0	0	0
Net Normal Cost - State	\$ 140,324,978	\$ 50,974,605	\$ 191,299,583
Estimated Annual Salaries	\$ 1,688,460,789	\$ 346,319,146	\$ 2,034,779,935
TOTAL ANNUAL EMPLOYER COST			
Contribution Amount			
Normal Cost	\$ 140,324,978	\$ 50,974,605	\$ 191,299,583
Payment on Unfunded Actuarial Accrued Liability	85,517,492	30,783,688	116,301,180
Total Annual Cost	\$ 225,842,470	\$ 81,758,293	\$ 307,600,763
As Percent of Payroll			
Normal Cost	8.31%	14.72%	9.40%
Payment on Unfunded Actuarial Accrued Liability	5.06%	8.89%	5.72%
Total Annual Cost	13.37%	23.61%	15.12%
INSURANCE FUND SHORTFALL			
Full Entry Age Funding Level	13.37%	23.61%	15.12%
Current Funding Allocation *	4.95%	11.75%	6.11%
Additional to Pick Up By 2016	8.42%	11.86%	9.01%
Expected Increase in Insurance Fund Rate in 2003 Valuation	0.36%	0.60%	N/A
* Without regard to any one-year temporary adjustments for actuarial gains			

TABLE V
COUNTY EMPLOYEES RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
Non-Hazardous Position Employees				
6/30/1996	\$ 901,011,537	\$ 1,045,404,313	\$ 60,491,275	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	29,886,573	33,944,297	1,910,962	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	62,468,342	69,346,539	3,804,074	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(21,106,379)	(22,868,725)	(1,224,071)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	70,199,744	74,141,879	3,877,398	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	247,855,413	254,861,748	13,038,217	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	72,249,680	72,249,680	3,619,637	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$ 1,362,564,910	\$ 1,527,079,731	\$ 85,517,492	
Hazardous Position Employees				
6/30/1996	\$ 318,111,968	\$ 369,091,416	\$ 21,357,106	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	53,367,623	60,613,387	3,412,352	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	15,379,222	17,072,579	936,533	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(13,162,362)	(14,261,396)	(763,355)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	17,607,673	18,596,449	972,538	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	82,316,738	84,643,654	4,330,200	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	10,745,007	10,745,007	538,314	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$ 484,365,869	\$ 546,501,096	\$ 30,783,688	

**TABLE VI
COUNTY EMPLOYEES RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS**

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	221,313,000	72,781,000	294,094,000
7/1/2003 to 6/30/2004	235,682,000	77,219,000	312,901,000
7/1/2004 to 6/30/2005	251,877,000	82,665,000	334,542,000
7/1/2005 to 6/30/2006	270,223,000	90,062,000	360,285,000
7/1/2006 to 6/30/2007	291,625,000	98,916,000	390,541,000
7/1/2007 to 6/30/2008	315,352,000	108,480,000	423,832,000
7/1/2008 to 6/30/2009	341,182,000	119,682,000	460,864,000
7/1/2009 to 6/30/2010	369,495,000	132,735,000	502,230,000
7/1/2010 to 6/30/2011	400,532,000	146,203,000	546,735,000
7/1/2011 to 6/30/2012	434,944,000	159,327,000	594,271,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Non-Hazardous Position Employees	Hazardous Position Employees	Total
7/1/2002 to 6/30/2003	42,240,000	17,234,000	59,474,000
7/1/2003 to 6/30/2004	48,735,000	19,368,000	68,103,000
7/1/2004 to 6/30/2005	55,927,000	21,797,000	77,724,000
7/1/2005 to 6/30/2006	64,328,000	24,875,000	89,203,000
7/1/2006 to 6/30/2007	73,728,000	28,341,000	102,069,000
7/1/2007 to 6/30/2008	83,982,000	32,089,000	116,071,000
7/1/2008 to 6/30/2009	95,779,000	36,607,000	132,386,000
7/1/2009 to 6/30/2010	109,489,000	42,044,000	151,533,000
7/1/2010 to 6/30/2011	125,158,000	48,040,000	173,198,000
7/1/2011 to 6/30/2012	142,265,000	54,157,000	196,422,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

**TABLE VII
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002**

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		\$ 6,883,298,951
Actuarial Present Value of Future Member Contributions		1,259,879,144
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 1,394,774,783	
For Unfunded Actuarial Accrued Liability	(1,390,652,529)	
Total		\$ 4,122,254
Total Actuarial Assets		\$ 8,147,300,349
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 2,466,990,575	
Vested Retirement	40,030,332	
Vested Membership	18,587,472	
Total - Inactive		\$ 2,525,608,379
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	\$ 4,729,475,482	
Disability Benefits	383,047,138	
Withdrawal Benefits (Vested and Refund of Contributions)	248,656,200	
Survivor Benefits	260,513,150	
Total - Active		\$ 5,621,691,970
Refunds and Expenses Payable		\$ 0
Total Actuarial Liabilities		\$ 8,147,300,349
Notes		
* Values as of June 30, 2002		
Market value of assets:		
Non-Hazardous	\$ 4,126,756,301	
Hazardous	\$ 1,144,349,093	
Total	\$ 5,271,105,394	
Actuarial value of assets:		\$ 6,883,298,951
Member's Contribution Account:		\$ 1,007,019,339
** Present value of accrued benefit deferred to normal retirement date.		

**TABLE VIII
COUNTY EMPLOYEES RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002**

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		\$ 685,181,185
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 2,230,358,954	
For Unfunded Actuarial Accrued Liability	2,073,580,827	
Total		\$ 4,303,939,781
Total Actuarial Assets		\$ 4,989,120,966
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 931,023,235	
Vested Retirement	69,611,342	
Vested Membership	0	
Total - Inactive		\$ 1,000,634,577
Actuarial Present Value of Future Benefits		
Active Members:		\$ 3,988,486,389
Refunds and Expenses Payable		\$ 0
Total Actuarial Liabilities		\$ 4,989,120,966
Notes		
* Values as of June 30, 2002		
Market value of assets:	Non-Hazardous	\$ 365,332,585
	Hazardous	\$ 187,533,847
	Total	\$ 552,866,432
Actuarial value of assets:		\$ 685,181,185

**TABLE IX
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2002
GASB DISCLOSURE INFORMATION**

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS			
Inactive Members			
Retired Members	23,296	3,246	26,542
Beneficiaries	2,851	237	3,088
Vested Retirements	4,470	148	4,618
Vested Membership	26,508	552	27,060
Total Inactive Members	57,125	4,183	61,308
Active Members			
Vested Members	46,937	4,855	51,792
Nonvested Members	32,913	4,094	37,007
Total Active Members	79,850	8,949	88,799
Total Members	136,975	13,132	150,107

TABLE X
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2002
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

		Non-Hazardous Position Employees	Hazardous Position Employees	Total
NUMBER OF MEMBERS				
Contracts in Force - Retirees and Dependents				
(1) Single;	- 100% Paid	2,903	870	3,773
Pre-Medicare	- 75% Paid	422	38	460
	- 50% Paid	419	34	453
	- 25% Paid	207	14	221
	- 0% Paid	579	0	579
(2) Family;	- 100% Paid	173	523	696
Pre-Medicare	- 75% Paid	8	18	26
	- 50% Paid	8	9	17
	- 25% Paid	3	6	9
	- 0% Paid	3	0	3
(3) Parent +;	- 100% Paid	155	183	338
Pre-Medicare	- 75% Paid	5	15	20
	- 50% Paid	2	6	8
	- 25% Paid	2	6	8
	- 0% Paid	60	0	60
(4) Couple +;	- 100% Paid	487	733	1,220
Pre-Medicare	- 75% Paid	43	10	53
	- 50% Paid	50	16	66
	- 25% Paid	23	6	29
	- 0% Paid	2	0	2
(5) Medicare Regular	- 100% Paid	1,055	27	1,082
	- 75% Paid	0	0	0
	- 50% Paid	0	0	0
	- 25% Paid	768	11	779
	- 0% Paid	623	0	623
(6) Medicare High Option	- 100% Paid	3,631	603	4,234
	- 75% Paid	1,841	64	1,905
	- 50% Paid	1,796	45	1,841
	- 25% Paid	974	20	994
	- 0% Paid	1,275	2	1,277
Vested Retirements		4,470	148	4,618
Vested Membership		26,508	552	27,060
Active Members		79,850	8,949	88,799
UNFUNDED MEDICAL BENEFIT OBLIGATION				
Medical Benefit Obligation				
Retirees, Beneficiaries and Vested Terminated Members		\$ 656,812,900	\$ 343,821,677	\$ 1,000,634,577
Active Members		1,320,764,138	437,363,297	1,758,127,435
Total Medical Benefit Obligation		\$ 1,977,577,038	\$ 781,184,974	\$ 2,758,762,012
Net Assets at Actuarial Value		\$ 450,497,307	\$ 234,683,878	\$ 685,181,185
Unfunded Medical Benefit Obligation		\$ 1,527,079,731	\$ 546,501,096	\$ 2,073,580,827
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method				

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from \$4,900,142,654 on June 30, 2001 to \$5,492,646,422 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from \$(2,010,357,911) to \$(1,390,652,529). Total actuarial value of assets as of June 30, 2002 was equal to \$6,883,298,951. The Unfunded Actuarial Accrued Liability increased from (104.68%) to (68.34%) as a percentage of annual payroll and increased from (41.0%) to (25.3%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from \$2,515,316,060 on June 30, 2001 to \$2,758,762,012 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from \$1,945,682,182 to \$2,073,580,827. Total actuarial value of assets as of June 30, 2002 was equal to \$685,181,185. The Unfunded Actuarial Accrued Liability decreased from 76.4% to 75.2% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

The change in contribution rate between the 2001 and 2002 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 2001 Contribution Rate	6.34%	16.28%
Change in Payment Percentage Due to Covered Payroll Experience	0.04%	0.09%
Investment Return Experience	1.15%	1.52%
Salary Increase Experience	(0.02%)	(0.02%)
Decrements Experience*	0.33%	0.24%
Change in Insurance Fund Rate		
> One-Year Temporary Funding Rate	(1.08%)	(0.43%)
> Increase in Long Term Funding Rate	0.35%	0.57%
Change in Administrative Expense Rate	0.06%	(0.05%)
Retiree COLA Effective 7/1/2001	0.17%	0.31%
Legislated Changes	None	None
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	N/A	N/A
June 30, 2002 Contribution Rate	7.34%	18.51%
* Includes mortality, disability, termination of employment and retirement experience.		

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees is 2.39%. An additional 4.95% is required to fund medical insurance for retirees, bringing the required contribution up to 7.34%. This is greater than the current 6.34% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should be increased to the 7.34% level, and we so recommend.

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees is 6.76%. An additional 11.75% is required to fund medical insurance for retirees, bringing the required contribution up to 18.51%. This is greater than the current 16.28% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should be increased to the 18.51% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2003 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

COUNTY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets
1960	\$ 5,602,131	\$ 4,737,680	84.6%	\$ 864,451	\$ 864,451
1965	12,510,487	6,897,273	55.1%	5,613,214	1,255,742
1971	40,305,948	16,885,927	41.9%	23,420,022*	4,850,170
1975	85,322,085	24,467,454	28.7%	60,854,631*	11,704,780
1976	128,824,236	50,089,614	38.9%	78,734,622*	17,879,991
1977	152,900,347	52,474,756	34.3%	100,425,591*	21,690,969
1978	175,194,867	50,394,913	28.8%	124,799,954*	24,374,363
1979	213,834,377	60,742,472	28.4%	153,091,905*	28,291,951
1980	266,018,621	75,787,680	28.5%	190,230,941*	37,139,036
1981	260,872,162	27,101,917	10.4%	233,770,245	43,539,304
1982	306,087,531	20,552,642	6.7%	285,534,889	51,764,644
1983	340,705,763	(2,450,006)	(0.8%)	343,155,769	57,620,880
1984	421,336,269	15,148,838	3.6%	406,187,431	63,031,662
1985	463,618,532	(14,424,689)	(3.1%)	478,043,221	71,855,790
1986	535,948,094	(67,867,706)	(12.7%)	603,815,800	125,772,579
1987	678,442,760	(49,287,967)	(7.3%)	727,730,727	123,914,927
1988	829,346,323	(10,232,573)	(1.2%)	839,578,896	111,848,169
1989	1,113,868,548	35,815,913	3.2%	1,078,052,635	238,473,739
1990	1,432,323,666	162,257,399	11.3%	1,270,066,267	192,013,632
1991	1,654,338,706	258,111,701	15.6%	1,396,227,005	126,160,738
1992**	1,861,978,403	126,939,495	6.8%	1,735,038,908	338,811,903
1993	2,079,930,047	94,249,338	4.5%	1,985,680,709	250,641,801
1994	2,330,344,241	156,989,469	6.7%	2,173,354,772	187,674,063
1995	2,603,575,921	149,447,861	5.7%	2,454,128,060	280,773,288
1996	2,778,316,473	(101,712,065)	(3.7%)	2,880,028,538	425,900,478
1997	3,144,928,093	(369,096,965)	(11.7%)	3,514,025,868	633,997,330
1998	3,529,912,902	(743,349,593)	(21.1%)	4,273,262,495	759,236,627
1999	3,955,132,659	(1,241,746,262)	(31.4%)	5,196,878,921	923,616,426
2000	4,453,154,831	(2,276,421,497)	(51.1%)	6,729,576,328	1,532,697,407
2001***	4,900,142,654	(2,010,357,911)	(41.0%)	6,910,500,565	180,924,237
2002	5,492,646,422	(1,390,652,529)	(25.3%)	6,883,298,951	(27,201,614)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

COUNTY EMPLOYEES RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets
1990	\$ 700,151,838	\$ 670,720,901	95.8%	\$ 29,430,397	\$ N/A
1991	823,012,809	780,592,065	94.8%	42,420,744	12,989,807
1992	1,041,905,457	984,949,556	94.5%	56,955,901	14,535,157
1993	1,244,258,042	1,170,004,170	94.0%	74,253,872	17,297,971
1994	1,551,138,800	1,451,623,905	93.6%	99,514,895	25,261,023
1995	1,679,893,225	1,554,439,285	92.5%	125,453,940	25,939,045
1996**	1,386,659,746	1,219,123,505	87.9%	167,536,241	42,082,301
1997	1,541,360,457	1,336,839,680	86.7%	204,520,777	36,984,536
1998	1,706,626,110	1,451,039,735	85.0%	255,586,375	51,065,598
1999	1,801,154,401	1,454,627,009	80.8%	346,527,392	90,941,017
2000	2,066,652,957	1,578,352,351	76.4%	488,300,606	141,773,214
2001***	2,515,316,060	1,954,682,182	77.4%	569,633,878	81,333,272
2002	2,758,762,012	2,073,580,827	75.2%	685,181,185	115,547,307
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Counties Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding policies adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A

Date

Edward W. Maynard, F.S.A.

Date

Mercer Human Resource Consulting
462 South Fourth Street, Suite 1500
Louisville, Kentucky 40202-3415
☎(502) 561-4500

SECTION V
STATISTICAL DATA
AS OF
JUNE 30, 2002

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE GROUP	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	2,327	34,575,116	14,858	222	3,019,752	13,602	2,549	37,594,868	14,749
20-24	2,265	42,490,991	18,760	1,539	23,987,567	15,586	3,804	66,478,558	17,476
25-29	2,031	47,876,339	23,573	2,940	51,215,167	17,420	4,971	99,091,506	19,934
30-34	2,699	71,795,881	26,601	4,846	81,821,861	16,884	7,545	153,617,742	20,360
35-39	3,390	96,175,267	28,370	7,236	121,033,492	16,727	10,626	217,208,759	20,441
40-44	4,137	123,343,932	29,815	8,938	159,783,331	17,877	13,075	283,127,264	21,654
45-49	4,075	124,821,181	30,631	8,626	163,256,582	18,926	12,701	288,077,763	22,682
50-54	3,799	115,927,314	30,515	7,281	142,181,725	19,528	11,080	258,109,039	23,295
55-59	2,604	72,812,282	27,962	4,783	91,217,162	19,071	7,387	164,029,445	22,205
60-64	1,628	41,508,279	25,496	2,393	42,639,567	17,818	4,021	84,147,847	20,927
65-69	658	13,497,696	20,513	733	11,576,384	15,793	1,391	25,074,080	18,026
70-74	278	5,116,107	18,403	246	3,715,188	15,102	524	8,831,295	16,854
75+	98	1,809,684	18,466	78	1,262,940	16,192	176	3,072,624	17,458
TOTAL	29,989	791,750,071	26,401	49,861	896,710,718	17,984	79,850	1,688,460,789	21,145

EARNINGS BY SERVICE GROUPS

SERVICE GROUP	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	1,771	28,178,827	15,911	1,227	17,465,895	14,235	2,998	45,644,722	15,225
1	4,126	78,518,113	19,030	5,949	81,803,744	13,751	10,075	160,321,858	15,913
2	3,210	70,282,167	21,895	5,280	78,518,222	14,871	8,490	148,800,390	17,527
3	2,746	62,601,819	22,797	4,845	74,142,299	15,303	7,591	136,744,118	18,014
4	2,355	58,930,526	25,024	4,092	65,212,412	15,937	6,447	124,142,938	19,256
0-4	14,208	298,511,454	21,010	21,393	317,142,572	14,825	35,601	615,654,026	17,293
5-9	6,461	173,157,816	26,800	13,087	227,036,764	17,348	19,548	400,194,580	20,472
10-14	4,210	131,138,002	31,149	8,103	162,711,622	20,080	12,313	293,849,624	23,865
15-19	2,544	86,318,335	33,930	3,950	92,908,002	23,521	6,494	179,226,336	27,599
20-24	1,547	56,666,000	36,630	2,143	54,982,391	25,657	3,690	111,648,391	30,257
25-29	789	33,827,796	42,874	933	31,251,900	33,496	1,722	65,079,696	37,793
30-34	182	9,414,312	51,727	207	8,314,008	40,164	389	17,728,320	45,574
35-39	42	2,295,240	54,649	31	1,438,944	46,418	73	3,734,184	51,153
40+	6	421,116	70,186	14	924,516	66,037	20	1,345,632	67,282
TOTAL	29,989	791,750,071	26,401	49,861	896,710,718	17,984	79,850	1,688,460,789	21,145

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE GROUP	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	237	5,651,388	23,846	5	106,776	21,355	242	5,758,164	23,794
20-24	497	15,001,092	30,183	59	1,500,204	25,427	556	16,501,296	29,679
25-29	1,353	45,898,488	33,923	160	5,000,652	31,254	1,513	50,899,140	33,641
30-34	1,704	64,820,360	38,040	206	7,039,020	34,170	1,910	71,859,380	37,623
35-39	1,529	63,608,000	41,601	181	6,528,240	36,068	1,710	70,136,240	41,015
40-44	1,086	46,884,416	43,172	143	5,675,372	39,688	1,229	52,559,787	42,766
45-49	792	37,060,692	46,794	117	4,309,604	36,834	909	41,370,296	45,512
50-54	449	20,777,420	46,275	64	2,306,520	36,039	513	23,083,940	44,998
55-59	206	8,576,304	41,633	41	1,233,360	30,082	247	9,809,664	39,715
60-64	78	3,051,996	39,128	10	300,084	30,008	88	3,352,080	38,092
65-69	15	465,828	31,055	5	108,708	21,742	20	574,536	28,727
70-74	5	204,108	40,822	2	39,852	19,926	7	243,960	34,851
75+	5	170,664	34,133	0	0	0	5	170,664	34,133
TOTAL	7,956	312,170,755	39,237	993	34,148,391	34,389	8,949	346,319,146	38,699

EARNINGS BY SERVICE GROUPS

SERVICE GROUP	.....MALE.....			.....FEMALE.....			.....TOTAL.....		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	434	10,357,256	23,865	66	1,457,816	22,088	500	11,815,071	23,630
1	770	21,911,168	28,456	158	4,097,748	25,935	928	26,008,916	28,027
2	805	26,265,032	32,627	138	4,347,648	31,505	943	30,612,680	32,463
3	633	21,917,112	34,624	79	2,491,560	31,539	712	24,408,672	34,282
4	661	23,682,696	35,829	106	3,437,460	32,429	767	27,120,156	35,359
0-4	3,303	104,133,263	31,527	547	15,832,232	28,944	3,850	119,965,495	31,160
5-9	1,807	71,307,668	39,462	208	7,458,680	35,859	2,015	78,766,347	39,090
10-14	1,567	69,841,188	44,570	159	6,681,612	42,023	1,726	76,522,800	44,335
15-19	729	35,382,612	48,536	49	2,387,340	48,721	778	37,769,952	48,547
20-24	278	15,028,296	54,059	23	1,324,032	57,567	301	16,352,328	54,327
25-29	193	11,521,080	59,695	7	464,496	66,357	200	11,985,576	59,928
30-34	65	4,053,444	62,361	0	0	0	65	4,053,444	62,361
35-39	12	779,616	64,968	0	0	0	12	779,616	64,968
40+	2	123,588	61,794	0	0	0	2	123,588	61,794
TOTAL	7,956	312,170,755	39,237	993	34,148,391	34,389	8,949	346,319,146	38,699

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2,327									2,327
20-24	1,846	419								2,265
25-29	1,445	539	47							2,031
30-34	1,541	833	305	20						2,699
35-39	1,518	811	676	330	55					3,390
40-44	1,506	946	705	514	371	95				4,137
45-49	1,254	906	720	502	392	256	45			4,075
50-54	1,165	805	712	479	335	227	66	10		3,799
55-59	846	583	459	340	194	117	46	17	2	2,604
60-64	452	349	347	251	134	71	16	6	2	1,628
65-69	211	186	133	61	39	16	6	5	1	658
70-74	80	68	75	29	16	4	3	2	1	278
75+	17	16	31	18	11	3		2		98
TOTAL	14,208	6,461	4,210	2,544	1,547	789	182	42	6	29,989

FEMALE

AGE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	222									222
20-24	1,445	94								1,539
25-29	2,389	522	29							2,940
30-34	3,343	1,132	334	37						4,846
35-39	4,092	2,071	751	286	36					7,236
40-44	3,771	2,944	1,386	472	276	89				8,938
45-49	2,599	2,702	1,946	755	389	195	40			8,626
50-54	1,794	1,782	1,785	1,073	516	235	85	11		7,281
55-59	1,038	1,042	1,109	772	518	242	44	14	4	4,783
60-64	478	582	508	362	298	131	29	2	3	2,393
65-69	143	163	179	130	70	34	6	3	5	733
70-74	55	44	64	50	27	3	2		1	246
75+	24	9	12	13	13	4	1	1	1	78
TOTAL	21,393	13,087	8,103	3,950	2,143	933	207	31	14	49,861

TOTAL

AGE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2,549									2,549
20-24	3,291	513								3,804
25-29	3,834	1,061	76							4,971
30-34	4,884	1,965	639	57						7,545
35-39	5,610	2,882	1,427	616	91					10,626
40-44	5,277	3,890	2,091	986	647	184				13,075
45-49	3,853	3,608	2,666	1,257	781	451	85			12,701
50-54	2,959	2,587	2,497	1,552	851	462	151	21		11,080
55-59	1,884	1,625	1,568	1,112	712	359	90	31	6	7,387
60-64	930	931	855	613	432	202	45	8	5	4,021
65-69	354	349	312	191	109	50	12	8	6	1,391
70-74	135	112	139	79	43	7	5	2	2	524
75+	41	25	43	31	24	7	1	3	1	176
TOTAL	35,601	19,548	12,313	6,494	3,690	1,722	389	73	20	79,850

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	237									237
20-24	480	17								497
25-29	986	359	8							1,353
30-34	705	670	320	9						1,704
35-39	345	376	574	230	4					1,529
40-44	198	173	315	294	93	13				1,086
45-49	123	113	199	118	126	94	19			792
50-54	105	44	101	45	43	70	35	6		449
55-59	83	32	28	22	10	16	11	4		206
60-64	34	17	13	10	1			2	1	78
65-69	5	3	7							15
70-74		1	2	1					1	5
75+	2	2			1					5
TOTAL	3,303	1,807	1,567	729	278	193	65	12	2	7,956

FEMALE

AGE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	5									5
20-24	59									59
25-29	128	32								160
30-34	101	77	27	1						206
35-39	78	34	56	12	1					181
40-44	59	19	30	24	9	2				143
45-49	58	19	21	8	8	3				117
50-54	26	15	14	3	4	2				64
55-59	24	7	8	1	1					41
60-64	6	1	3							10
65-69	2	3								5
70-74	1	1								2
75+										0
TOTAL	547	208	159	49	23	7	0	0	0	993

TOTAL

AGE GROUP	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	242									242
20-24	539	17								556
25-29	1,114	391	8							1,513
30-34	806	747	347	10						1,910
35-39	423	410	630	242	5					1,710
40-44	257	192	345	318	102	15				1,229
45-49	181	132	220	126	134	97	19			909
50-54	131	59	115	48	47	72	35	6		513
55-59	107	39	36	23	11	16	11	4		247
60-64	40	18	16	10	1			2	1	88
65-69	7	6	7							20
70-74	1	2	2	1					1	7
75+	2	2			1					5
TOTAL	3,850	2,015	1,726	778	301	200	65	12	2	8,949

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP										
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL	
0-19	2,549										2,549
	14,749										14,749
20-24	3,291	513									3,804
	17,111	19,818									17,476
25-29	3,834	1,061	76								4,971
	18,651	24,187	25,299								19,934
30-34	4,884	1,965	639	57							7,545
	17,641	24,088	28,794	30,271							20,360
35-39	5,610	2,882	1,427	616	91						10,626
	16,675	20,595	29,024	32,169	33,742						20,441
40-44	5,277	3,890	2,091	986	647	184					13,075
	17,108	19,641	25,565	32,440	36,155	41,357					21,654
45-49	3,853	3,608	2,666	1,257	781	451	85				12,701
	17,957	19,714	23,262	29,356	33,864	41,263	44,560				22,682
50-54	2,959	2,587	2,497	1,552	851	462	151	21			11,080
	18,765	20,688	22,341	26,412	30,241	39,714	48,009	45,460			23,295
55-59	1,884	1,625	1,568	1,112	712	359	90	31	6		7,387
	17,660	19,846	22,048	24,082	26,291	33,607	47,277	58,024	53,062		22,205
60-64	930	931	855	613	432	202	45	8	5		4,021
	15,724	18,090	20,558	24,808	24,816	32,583	39,483	49,578	84,602		20,927
65-69	354	349	312	191	109	50	12	8	6		1,391
	14,583	16,283	18,053	18,748	21,517	29,886	36,885	47,256	59,246		18,026
70-74	135	112	139	79	43	7	5	2	2		524
	14,389	13,656	17,280	19,763	17,809	30,039	37,574	36,138	79,926		16,854
75+	41	25	43	31	24	7	1	3	1		176
	13,068	12,921	15,606	21,866	18,818	23,042	29,244	44,612	88,920		17,458
TOTAL	35,601	19,548	12,313	6,494	3,690	1,722	389	73	20		79,850
	17,293	20,472	23,865	27,599	30,257	37,793	45,574	51,153	67,282		21,145

TOTAL EARNINGS 1,688,460,789
 AVERAGE AGE 43.03
 AVERAGE SERVICE 7.58

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP									TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
0-19	242									242
	23,794									23,794
20-24	539	17								556
	29,561	33,401								29,679
25-29	1,114	391	8							1,513
	31,863	38,483	44,639							33,641
30-34	806	747	347	10						1,910
	31,807	40,017	45,714	46,746						37,623
35-39	423	410	630	242	5					1,710
	31,799	39,198	45,142	49,469	40,656					41,015
40-44	257	192	345	318	102	15				1,229
	31,775	39,264	43,882	48,533	54,063	51,162				42,766
45-49	181	132	220	126	134	97	19			909
	34,874	36,987	42,202	49,282	56,217	61,342	63,078			45,512
50-54	131	59	115	48	47	72	35	6		513
	32,486	38,857	43,401	44,651	53,526	60,760	60,787	63,894		44,998
55-59	107	39	36	23	11	16	11	4		247
	31,067	39,597	40,441	47,163	45,837	55,828	66,130	68,928		39,715
60-64	40	18	16	10	1			2	1	88
	33,214	39,169	43,878	38,227	34,488			60,270	79,116	38,092
65-69	7	6	7							20
	30,319	20,806	33,924							28,727
70-74	1	2	2	1					1	7
	22,488	23,022	26,712	77,532					44,472	34,851
75+	2	2			1					5
	34,782	27,048			47,004					34,133
TOTAL	3,850	2,015	1,726	778	301	200	65	12	2	8,949
	31,160	39,090	44,335	48,547	54,327	59,928	62,361	64,968	61,794	38,699

TOTAL EARNINGS 346,319,146
AVERAGE AGE 36.27
AVERAGE SERVICE 7.76

Note: Earnings shown in this matrix have not been limited by 401(a) (17).

COUNTY EMPLOYEES RETIREMENT SYSTEM - NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
 TABULATION BY MONTHLY SALARY - JUNE 30, 2002

<u>MONTHLY SALARY</u>	<u>NUMBER OF MEMBERS</u>		
	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>
UNDER \$ 500	590	1,000	1,590
\$ 500 - \$ 749	1,423	4,552	5,975
\$ 750 - \$ 999	2,509	11,899	14,408
\$ 1,000 - \$ 1,249	2,439	7,629	10,068
\$ 1,250 - \$ 1,499	2,827	5,770	8,597
\$ 1,500 - \$ 1,749	3,050	4,598	7,648
\$ 1,750 - \$ 1,999	2,967	3,712	6,679
\$ 2,000 - \$ 2,249	2,682	2,876	5,558
\$ 2,250 - \$ 2,499	2,192	2,239	4,431
\$ 2,500 - \$ 2,749	1,757	1,545	3,302
\$ 2,750 - \$ 2,999	1,527	1,211	2,738
\$ 3,000 - \$ 3,499	2,160	1,290	3,450
\$ 3,500 - \$ 3,999	1,253	637	1,890
\$ 4,000 - \$ 4,499	819	318	1,137
\$ 4,500 - \$ 4,999	543	193	736
\$ 5,000 - \$ 5,499	397	142	539
\$ 5,500 - \$ 5,999	283	96	379
\$ 6,000 - \$ 6,499	192	52	244
\$ 6,500 - \$ 6,999	112	34	146
\$ 7,000 - \$ 7,499	80	23	103
\$ 7,500 - \$ 7,999	45	11	56
\$ 8,000 - \$ 8,499	32	6	38
\$ 8,500 - \$ 8,999	34	7	41
\$ 9,000 - \$ 9,499	18	4	22
\$ 9,500 - \$ 9,999	12	4	16
\$ 10,000 AND OVER	46	13	59
TOTAL	29,989	49,861	79,850
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	240	63	303

COUNTY EMPLOYEES RETIREMENT SYSTEM - HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
 TABULATION BY MONTHLY SALARY - JUNE 30, 2002

MONTHLY SALARY	NUMBER OF MEMBERS		
	MALES	FEMALES	TOTAL
UNDER \$ 500	44	2	46
\$ 500 - \$ 749	13	5	18
\$ 750 - \$ 999	38	5	43
\$ 1,000 - \$ 1,249	45	10	55
\$ 1,250 - \$ 1,499	55	22	77
\$ 1,500 - \$ 1,749	163	49	212
\$ 1,750 - \$ 1,999	319	87	406
\$ 2,000 - \$ 2,249	486	114	600
\$ 2,250 - \$ 2,499	802	112	914
\$ 2,500 - \$ 2,749	802	110	912
\$ 2,750 - \$ 2,999	768	92	860
\$ 3,000 - \$ 3,499	1,388	140	1,528
\$ 3,500 - \$ 3,999	1,282	128	1,410
\$ 4,000 - \$ 4,499	809	66	875
\$ 4,500 - \$ 4,999	453	23	476
\$ 5,000 - \$ 5,499	209	9	218
\$ 5,500 - \$ 5,999	121	8	129
\$ 6,000 - \$ 6,499	64	4	68
\$ 6,500 - \$ 6,999	54	3	57
\$ 7,000 - \$ 7,499	26	2	28
\$ 7,500 - \$ 7,999	5	1	6
\$ 8,000 - \$ 8,499	6	0	6
\$ 8,500 - \$ 8,999	2	1	3
\$ 9,000 - \$ 9,499	1	0	1
\$ 9,500 - \$ 9,999	1	0	1
\$ 10,000 AND OVER	0	0	0
TOTAL	7,956	993	8,949
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	37	4	41

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

<u>MEMBERS CURRENTLY ACTIVE IN CERS NONHAZARDOUS</u>			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	482	2,138	2,620
KERS - HAZARDOUS	23	64	87
CERS - HAZARDOUS	0	293	293
STATE POLICE	6	19	25
TOTAL - ALL SYSTEMS	511	2,514	3,025

<u>MEMBERS CURRENTLY NOT ACTIVE IN CERS NONHAZARDOUS</u>			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	2,618	203	2,821
KERS - HAZARDOUS	230	75	305
CERS - HAZARDOUS	2,688	68	2,756
STATE POLICE	109	14	123
TOTAL - ALL SYSTEMS	5,645	360	6,005

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM
 HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
 MEMBERS WITH SERVICE IN ANOTHER SYSTEM
 JUNE 30, 2002

<u>MEMBERS CURRENTLY ACTIVE IN CERS HAZARDOUS</u>			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	20	290	310
KERS - HAZARDOUS	11	109	120
CERS - NONHAZARDOUS	0	2,688	2,688
STATE POLICE	4	45	49
TOTAL - ALL SYSTEMS	35	3,132	3,167

<u>MEMBERS CURRENTLY NOT ACTIVE IN CERS HAZARDOUS</u>			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	81	33	114
KERS - HAZARDOUS	45	6	51
CERS - NONHAZARDOUS	293	68	361
STATE POLICE	73	3	76
TOTAL - ALL SYSTEMS	492	110	602

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	2,520	1,742,392.36	7,972	3,777,541.65	10,492	5,519,934.01
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	1,679	1,198,478.29	652	252,192.01	2,331	1,450,670.30
66-2/3% TO BENEFICIARY	477	607,177.07	188	139,359.90	665	746,536.97
50% TO BENEFICIARY	721	749,760.88	495	364,877.31	1,216	1,114,638.19
POP-UP OPTION	1,636	1,706,166.09	973	665,044.00	2,609	2,371,210.09
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	1,205	693,871.93	2,150	1,006,808.94	3,355	1,700,680.87
SOCIAL SECURITY OPTION						
OPTION C	213	312,986.02	344	274,804.01	557	587,790.03
OPTION D	484	690,346.70	195	165,142.55	679	855,489.25
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	335.02	1	335.02	2	670.04
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	457	317,859.08	370	188,254.95	827	506,114.03
20 YEARS CERTAIN & LIFE	288	261,984.27	274	164,236.43	562	426,220.70
5 YEARS ONLY	0	0.00	1	128.78	1	128.78
TOTAL	9,681	8,281,357.71	13,615	6,998,725.55	23,296	15,280,083.26

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
RETIRED LIVES SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	381	645,180.89	109	106,207.10	490	751,387.99
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	361	553,210.34	18	13,441.64	379	566,651.98
66-2/3% TO BENEFICIARY	172	347,047.60	5	7,308.15	177	354,355.75
50% TO BENEFICIARY	252	470,500.60	12	9,805.78	264	480,306.38
POP-UP OPTION	996	1,854,748.03	34	37,539.54	1,030	1,892,287.57
10 YEARS CERTAIN	38	67,135.63	5	11,530.59	43	78,666.22
10 YEARS CERTAIN & LIFE	126	197,295.71	27	35,308.12	153	232,603.83
SOCIAL SECURITY OPTION						
OPTION C	91	141,286.94	7	7,161.39	98	148,448.33
OPTION D	283	416,893.66	14	10,378.64	297	427,272.30
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	96	28,429.59	73	21,394.32	169	49,823.91
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	42	59,888.34	4	5,753.26	46	65,641.60
20 YEARS CERTAIN & LIFE	84	132,361.54	16	13,709.58	100	146,071.12
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	2,922	4,913,978.87	324	279,538.11	3,246	5,193,516.98

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	209	73,353.33	1,176	443,996.43	1,385	517,349.76
66-2/3% TO BENEFICIARY	20	5,611.05	135	51,743.74	155	57,354.79
50% TO BENEFICIARY	43	10,724.49	238	71,297.20	281	82,021.69
POP-UP OPTION	57	24,930.03	173	99,562.45	230	124,492.48
10 YEARS CERTAIN	56	26,377.07	98	64,378.38	154	90,755.45
10 YEARS CERTAIN & LIFE	71	34,770.82	132	59,930.90	203	94,701.72
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	10	2,751.39	44	44,232.55	54	46,983.94
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	1	406.56	4	636.37	5	1,042.93
DEPENDENT CHILD	0	0.00	0	0.00	0	0.00
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	29	17,252.87	87	49,135.16	116	66,388.03
20 YEARS CERTAIN & LIFE	28	12,538.24	50	38,271.06	78	50,809.30
5 YEARS ONLY	130	65,689.87	60	51,413.48	190	117,103.35
TOTAL	654	274,405.72	2,197	974,597.72	2,851	1,249,003.44

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
BENEFICIARY SUMMARY
JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	3	1,702.09	81	82,497.40	84	84,199.49
66-2/3% TO BENEFICIARY	0	0.00	17	20,418.41	17	20,418.41
50% TO BENEFICIARY	0	0.00	18	10,571.64	18	10,571.64
POP-UP OPTION	0	0.00	40	54,272.10	40	54,272.10
10 YEARS CERTAIN	12	17,704.33	10	13,490.12	22	31,194.45
10 YEARS CERTAIN & LIFE	1	1,632.78	1	38.72	2	1,671.50
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	1	3,403.17	34	47,439.21	35	50,842.38
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	3	3,084.24	3	3,084.24
DEPENDENT CHILD	1	300.17	0	0.00	1	300.17
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
20 YEARS CERTAIN & LIFE	1	1,198.36	7	11,819.97	8	13,018.33
5 YEARS ONLY	6	2,580.57	1	586.00	7	3,166.57
TOTAL	25	28,521.47	212	244,217.81	237	272,739.28

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED RETIREMENT SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	27	3,158.35	5	732.92	32	3,891.27
25-29	44	7,359.09	41	6,178.38	85	13,537.47
30-34	102	23,935.29	199	35,633.96	301	59,569.25
35-39	192	58,309.40	323	72,550.78	515	130,860.18
40-44	202	69,221.76	499	105,424.97	701	174,646.73
45-49	292	116,880.45	673	168,545.68	965	285,426.13
50-54	293	117,035.20	669	169,617.32	962	286,652.52
55-59	173	64,118.89	395	91,775.59	568	155,894.48
60-64	102	28,066.36	138	29,882.54	240	57,948.90
65-69	26	2,813.91	26	3,888.43	52	6,702.34
70-74	11	1,597.91	13	3,419.98	24	5,017.89
75-79	11	480.67	8	1,499.73	19	1,980.40
80-84	2	396.01	3	355.51	5	751.52
85 +	0	0.00	1	50.59	1	50.59
TOTAL	1,477	493,373.29	2,993	689,556.38	4,470	1,182,929.67

COUNTY EMPLOYEES RETIREMENT SYSTEM
 HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
 VESTED RETIREMENT SUMMARY
 JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	3	550.87	0	0.00	3	550.87
30-34	18	5,108.38	3	262.81	21	5,371.19
35-39	22	6,685.21	9	2,704.67	31	9,389.88
40-44	26	12,957.33	4	2,226.99	30	15,184.32
45-49	34	14,199.31	5	1,854.58	39	16,053.89
50-54	14	5,808.21	4	1,015.96	18	6,824.17
55-59	3	1,137.52	0	0.00	3	1,137.52
60-64	2	253.21	0	0.00	2	253.21
65-69	1	198.57	0	0.00	1	198.57
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	123	46,898.61	25	8,065.01	148	54,963.62

COUNTY EMPLOYEES RETIREMENT SYSTEM
NONHAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

<u>AGE NEAREST BIRTHDAY</u>	<u>MALE LIVES</u>		<u>FEMALE LIVES</u>		<u>TOTAL</u>	
	<u>NUMBER</u>	<u>ACCUMULATED CONTRIBUTIONS</u>	<u>NUMBER</u>	<u>ACCUMULATED CONTRIBUTIONS</u>	<u>NUMBER</u>	<u>ACCUMULATED CONTRIBUTIONS</u>
15-19	2,656	461,225.54	128	45,368.67	2,784	506,594.21
20-24	847	805,234.41	444	232,598.13	1,291	1,037,832.54
25-29	979	668,314.11	1,772	1,164,464.94	2,751	1,832,779.05
30-34	1,293	1,027,408.22	3,040	2,425,519.30	4,333	3,452,927.52
35-39	1,117	953,587.88	2,520	2,109,663.73	3,637	3,063,251.61
40-44	1,028	838,406.93	2,386	2,102,716.32	3,414	2,941,123.25
45-49	965	935,928.64	2,136	2,245,256.49	3,101	3,181,185.13
50-54	767	958,193.31	1,522	1,701,563.48	2,289	2,659,756.79
55-59	515	771,943.60	892	1,028,891.69	1,407	1,800,835.29
60-64	328	382,923.61	438	424,555.00	766	807,478.61
65-69	175	142,918.31	190	185,375.29	365	328,293.60
70-74	109	83,312.57	100	41,863.83	209	125,176.40
75-79	58	26,588.08	40	24,506.33	98	51,094.41
80-84	23	11,537.02	17	8,595.12	40	20,132.14
85 +	11	5,865.59	12	3,654.35	23	9,519.94
TOTAL	10,871	8,073,387.82	15,637	13,744,592.67	26,508	21,817,980.49

COUNTY EMPLOYEES RETIREMENT SYSTEM
HAZARDOUS DUTY EMPLOYEE CLASSIFICATION
VESTED MEMBERSHIP SUMMARY
JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS	NUMBER	ACCUMULATED CONTRIBUTIONS
15-19	70	19,023.58	1	517.91	71	19,541.49
20-24	35	74,143.54	4	1,245.58	39	75,389.12
25-29	97	183,307.69	25	61,068.23	122	244,375.92
30-34	99	172,840.17	20	52,072.68	119	224,912.85
35-39	69	145,411.31	15	20,715.80	84	166,127.11
40-44	31	73,149.32	13	9,549.86	44	82,699.18
45-49	30	89,522.41	5	11,794.37	35	101,316.78
50-54	19	32,195.82	3	50,360.97	22	82,556.79
55-59	9	23,737.33	3	5,370.69	12	29,108.02
60-64	1	3,676.02	1	1,050.28	2	4,726.30
65-69	1	8,750.54	0	0.00	1	8,750.54
70-74	1	248.83	0	0.00	1	248.83
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	462	826,006.56	90	213,746.37	552	1,039,752.93

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the County Employees Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 1998.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years for nonhazardous positions. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used. For a member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years.

For hazardous positions, final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

- (a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.
- (b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.
- (c) Employers may elect to purchase up to 6 months additional service credit based on an employee's unused sick leave.

Eligibility

Any county or political subdivision or instrumentality, including school boards or urban county government may participate in the System upon approval by the Board. Membership in the system consists of:

- (a) all persons who become employees of a county after such county first participates,
- (b) all persons who are employees on the date a county first participates and who elect within thirty days to become members and make contributions.

Membership does not include employees of a county who are members of some other state, county, or local retirement system, supported in whole or in part by public funds.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 2.20% of the member's final compensation multiplied by his service will be payable. For hazardous positions, a monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service, additional years of service credit will be added up to maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a \$5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of \$10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.50% rather than 2.20%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of \$5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (8% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

FORTY-FOURTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 2002

STATE POLICE RETIREMENT SYSTEM

SECTION I

INTRODUCTION

The results of the forty-fourth annual actuarial valuation of the State Police Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 2002.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions in Section VI. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated in Section II.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System as to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Cost Method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed. The payment to fund the Unfunded Actuarial Accrued Liability is the amount necessary to amortize this liability over 30 years using the "level-percentage-of-payroll" method. Under the "level-percentage-of-payroll" method, the amortization payment is an amount which remains constant as a percentage of payroll over the 30 years. The initial 30 year period began with the 1990 valuation. In each subsequent valuation, any change in Unfunded Actuarial Accrued Liability is identified and established as a separate amortization base with a 30 year funding period beginning with that valuation. The change in Unfunded Actuarial Accrued Liability established as a separate base in each valuation will include changes attributable to experience gains and/or losses over the prior year, as well as changes attributable to benefit improvements and revisions in actuarial assumptions and funding methods.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate is being increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there was a deterioration in the funded position of the medical premium benefit in which case the rate levels were to be reviewed to redetermine an appropriate current funding level, or unless recommended contributions are not made in the prior year, in which case the shortfall would be spread over future years through an increase in the contribution rate. This continued through the 1995 valuation. Effective with the 1996 valuation, a new

medical insurance funding policy was adopted by the Board. Under this revised policy, the medical insurance contribution rate for the 1996 valuation was set equal to the 1995 rate plus any

reduction in the retirement and administrative expense rates between the 1995 and 1996 valuations (but in no event to be less than the 1995 medical insurance contribution rate). Beginning with the 1997 valuation, the medical insurance contribution rate is to be increased at the start of each biennium (coincides with valuations in odd numbered years) by the percentage amount necessary to raise this medical insurance rate to the full Entry Age Normal Cost Method contribution rate by the year 2016. There will be no changes in the even numbered years unless there are actuarial gains relative to the retirement funding which will then be used to increase the medical insurance funding rate for the next year only.

The Board reviewed this funding policy in conjunction with the experience study prepared following the 2000 valuation. The current policy relative to the establishment of the permanent portion of the insurance fund rate was not changed. But in years where there may be a temporary reduction in the retirement fund contribution rate, the Board may use the amount of that reduction as an additional temporary contribution to the insurance fund.

In computing the full Entry Age Normal Cost Method contribution rate, liabilities are to be developed based on actuarial assumptions in use in the current valuation (as adjusted from time to time due to experience studies) and actuarial value of assets based on the same method as employed for the retirement benefit valuation. The actuarial value of assets for the medical contribution rate valuation utilized book value prior to the 1996 valuation, and a 5-year market to book value average from 1996 through the 2000 valuation. The current asset valuation method was employed effective with the 2001 valuation.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 2000 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the 2001 and subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 2000 experience study. The actuarial assumptions as used in this valuation are described later in this section.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for both the Retirement Fund and Insurance Fund:

1. Develop expected assets by projecting valuation assets from the prior valuation using the assumed valuation interest rate from the prior valuation and actual cash flows for the 12 months ending on the current valuation date.
2. The current year investment gain/loss shall be determined as the difference between actual market value as of the current valuation date and expected assets as computed in (1), further adjusted for any amount of investment gain/loss from prior years not yet recognized as of the current valuation date.
3. The amount of investment gain/loss for the current year shall be reflected equally over the current year and the following 4 years.
4. Valuation assets will be equal to expected assets from (1) plus/minus the amount of investment gain/loss from the current and prior 4 years to be recognized in the current year.
5. The starting point for this method shall be the actuarial value of assets as computed in the 2000 valuation under the prior asset valuation method then in effect. Only investment gains/losses occurring after June 30, 2000 shall be recognized and amortized under this method.

The following table shows the derivation of valuation assets for the Retirement Fund and the Insurance Fund as of the current valuation:

	RETIREMENT FUND	INSURANCE FUND
June 30, 2001 Valuation Assets	456,160,709	79,863,577
Cash Flows		
> Employer Contributions	(17,643)	9,579,899
> Member Contributions	4,417,691	
> Retirement Benefits	24,839,051	
> Net Refunds	(4,234)	
> Insurance Premiums		4,014,728
> Administrative Expenses	75,908	29,022
> Investment Manager Fees	197,765	28,911
Valuation Interest Assumption	8.25%	8.25%
Expected Return on Valuation Assets Reflecting Actual Cash Flows *	36,779,035	6,815,919
Expected Valuation Assets	472,231,302	92,186,734
Actual Market Value of Assets	328,744,331	68,074,444
Investment Gain/(Loss)	(143,486,971)	(24,112,290)
Amortization Amounts From Prior Valuations		
> Valuation Year - 1		
>> Initial Amount	(114,461,071)	(12,422,108)
>> Current Valuation Amount	(91,568,857)	(9,937,686)
>> Amortization	(22,892,214)	(2,484,422)
> Valuation Year - 2		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year - 3		
>> Initial Amount	N/A	N/A
>> Current Valuation Amount	N/A	N/A
>> Amortization	N/A	N/A
> Valuation Year - 4		
>> Initial Amount	N/A	N/A
	N/A	N/A
	N/A	N/A
Unamortized Amount of Gain/(Loss) From Prior Valuations	(91,568,857)	(9,937,686)
Valuation Date		
> Amount	(51,918,114)	(14,174,604)
> Amortization	(10,383,623)	(2,834,921)
June 30, 2002 Valuation Assets		
> Expected Assets	472,231,302	92,186,734
> Amortization Amounts	(33,275,837)	(5,319,343)
> Valuation Assets	438,955,465	86,867,391

* Cash flows are assumed equally spread throughout the year

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

- (1) Mortality:
 - (a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year.
 - (b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).
- (2) Disablement - Graduated rates based on 2000 experience study (no change from 1995 experience study).
- (3) Termination of employment - Graduated rates based on 2000 experience study.
- (4) Retirement - 60% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.
- (5) Marital status
 - (a) Percentage married - 100%.
 - (b) Age difference - Males are assumed to be 3 years older than their spouses.
- (6) Dependent children - For duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.
- (7) Investment return - 8.25% per year, net of investment related expenses, compounded annually.
- (8) Compensation progression - 1st year: 12.00%
2nd year: 10.00%
3rd year: 8.00%
Thereafter: 6.50%, compounded annually.
- (9) Underlying Inflation Rate - 3.50% per year, reflected in investment return and compensation progression assumptions.

(10) Retiree Medical Insurance

- It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly contribution rates were assumed to be as follows:

Pre-Medicare Coverage - - -
Rate in Effect on Valuation Date

	<u>Single</u>	<u>Couple</u>	<u>Parent Plus</u>	<u>Family</u>
Region 1	\$234.00	\$473.96	\$315.96	\$526.60
Region 2	260.44	527.44	351.60	586.04
Region 3	300.64	608.96	405.96	676.60
Region 4	320.96	650.00	433.32	722.24
Region 5	340.48	689.44	459.64	766.04
All others	245.00	522.92	348.64	581.04

Region 1: Boone, Campbell, Gallatin, Grant, Kenton and Pendleton

Region 2: Allen, Ballard, Bell, Caldwell, Calloway, Carlisle, Clay, Crittenden, Fulton, Graves, Harlan, Harrison, Hickman, Hopkins, Knott, Lincoln, Livingston, Lyon, McCracken, Marshall, Perry, Pike, Robertson, Rockcastle, Rowan, Simpson and Webster

Region 3: Lewis, Mason, Morgan and Pulaski

Region 4: Boyd, Carter, Christian, Daviess, Elliott, Greenup, Hancock, Henderson, Lawrence, McLean, Todd, Trigg and Union

Region 5: Breckinridge and Grayson

<u>Carrier</u>	<u>Medicare Rate</u>		<u>Contracts in Force</u>	
	<u>Low Option</u>	<u>High Option</u>	<u>Low Option</u>	<u>High Option</u>
Anthem BC/BS	103.18	252.56	3,258	20,040
Bankers Life	82.70	195.35	594	331
Option 2000	98.18	247.56	547	1,852

Weighted Medicare Coverage - - -
Rate in Effect on Valuation Date

	<u>Low Option</u>	<u>High Option</u>
All members	\$99.79	\$251.29

In determining the target Entry Age Funding rate in valuations beginning with 1996, it was assumed that medical contribution rates would grow at the following annual levels:

<u>Years</u>	<u>Medical Increase</u>
2001 - 2002	12%
2003 - 2005	10%
2006 - 2010	9%
2011 - 2015	8%
2016 - 2020	7.5%
Thereafter	7%

The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

(11) Missing data

- For those active members with incomplete data, the following assumptions were made:
 - . If reported salary was zero or blank, then monthly salary was assumed to be \$2,139.72.
 - . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(12) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:
 - . Service under all systems is aggregated for purposes of determining benefit eligibility.
 - . Future service is projected only under the system in which the member is currently active.
 - . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
 - . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the

valuation of the system in which the service was earned.

B. SAMPLE RATES

(1) Annual Rates of Mortality:

<u>Age</u>	<u>Active Mortality*</u>		<u>Disabled Mortality</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

*Plus 0.05% duty death rate prior to retirement.

(2) Annual Rates of Decrement:

<u>Age</u>	<u>Disablement</u>	<u>Ultimate Termination</u>	
		<u>KERS and CERS Hazardous</u>	<u>SPRS</u>
25	0.042%	3.04%	1.82%
30	0.050%	3.38%	2.03%
40	0.132%	1.50%	0.90%
50	0.530%	0.00%	0.00%
55	0.992%	0.00%	0.00%
60	1.743%	0.00%	0.00%

(3) Compensation Progression (after 1st 3 Years):

<u>Age</u>	<u>Rate of Annual Increase</u>	<u>Compensation at Normal Retirement as Percentage Of Current Annual Compensation</u>
25	6.50%	661.4%
30	6.50%	482.8%
40	6.50%	257.2%
50	6.50%	137.0%

SECTION III

RESULTS OF THE 2002 ACTUARIAL VALUATION

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table I. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 2002.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 2002 are described in Section II. These costs are classified by type of benefit. The Normal Cost contribution rate is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table II for the Retirement Fund and Table IV for the Insurance Fund. A breakdown of the total Unfunded Actuarial Accrued Liability into the amortization amounts by year is shown in Table III for the Retirement Fund and Table V for the Insurance Fund. Table VI has been included to show an estimate of projected payouts from the funds over the next 10 years based on current plan provisions and actuarial assumptions.

Actuarial Balance Sheet

Table VII is the actuarial balance sheet of the State Police Retirement System as of June 30, 2002 for the Retirement Fund. Table VIII is the actuarial balance sheet for the Insurance Fund. The "actuarial balance sheet" displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Accountant's Information

Table IX contains additional information needed to comply with GASB disclosure requirements relative to the Retirement Fund.

Table X contains additional information needed to comply under GASB Statement No. 12 relative to the Insurance Fund.

TABLE I
STATE POLICE RETIREMENT SYSTEM
RETIREMENT AND INSURANCE FUND
DETERMINATION OF CONTRIBUTION RATE - JUNE 30, 2002

UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND

		Percent *
Total Actuarial Accrued Liability	\$ 380,790,346	866.18%
Assets at Actuarial Value	438,955,465	998.49%
Unfunded Actuarial Accrued Liability	\$ (58,165,119)	(132.31%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	\$ (3,169,195)	(7.21%)

NORMAL COST - RETIREMENT FUND

Retirement Benefits	\$ 6,855,316	15.59%
Disability Benefits	289,030	0.65%
Withdrawal Benefits (Vested and Refund of Contributions)	276,188	0.63%
Survivor Benefits	240,783	0.55%
Total Normal Cost	\$ 7,661,317	17.42%
Less: Employee Contributions	3,417,599	7.77%
Normal Cost - State	\$ 4,243,718	9.65%

TOTAL ANNUAL EMPLOYER COST - RETIREMENT AND INSURANCE FUND

Normal Cost	\$ 4,243,718	9.65%
Payment on Unfunded Actuarial Accrued Liability	(3,169,195)	(7.21%)
Administrative Expense	89,883	0.20%
Subtotal - Retirement Fund (Not Less Than Zero)	\$ 1,164,406	2.64%
Group Hospital and Medical Insurance Premiums	8,326,374	18.94%
Total Annual Cost	\$ 9,490,780	21.58%
* Based on estimated annual salaries of	\$ 43,961,844	

TABLE II
STATE POLICE RETIREMENT SYSTEM
RETIREMENT FUND
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS - JUNE 30, 2002

ACTUARIAL ACCRUED LIABILITY	
Active Members	
Retirement Benefits	\$ 122,166,424
Disability Benefits	2,579,547
Withdrawal Benefits (Vested and Refund of Contributions)	724,415
Survivor Benefits	2,821,347
Total - Actives	\$ 128,291,733
Inactive Members	
Retired Members and Beneficiaries	\$ 252,056,847
Vested Retirement	376,376
Vested Membership	65,390
Total - Inactives	\$ 252,498,613
Total Actuarial Accrued Liability	\$ 380,790,346
UNFUNDED ACTUARIAL ACCRUED LIABILITY	
Total Actuarial Accrued Liability	\$ 380,790,346
Less Actuarial Value of Assets	438,955,465
Unfunded Actuarial Accrued Liability	\$ (58,165,119)
NORMAL COST	
Retirement Benefits	\$ 6,855,316
Disability Benefits	289,030
Withdrawal Benefits (Vested and Refund of Contributions)	276,188
Survivor Benefits	240,783
Total Normal Cost	\$ 7,661,317
Less Employee Contributions	3,417,599
Total Normal Cost - State	\$ 4,243,718

**TABLE III
STATE POLICE RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - RETIREMENT FUND - JUNE 30, 2002**

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
6/30/1990	\$ 8,982,071	\$ 11,307,726	\$ 803,934	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1991	9,963,656	12,447,889	850,079	Experience gains/losses for 7/1/1990 to 6/30/1991
6/30/1992	(24,502,117)	(30,295,949)	(1,992,686)	Experience gains/losses for 7/1/1991 to 6/30/1992; Retiree COLA's; Asset valuation method change
6/30/1993	(3,706,436)	(4,524,632)	(287,332)	Experience gains/losses for 7/1/1992 to 6/30/1993; State contribution shortfall
6/30/1994	10,380,135	12,482,949	767,027	Experience gains/losses for 7/1/1993 to 6/30/1994; Retiree COLA's; State contribution shortfall
6/30/1995	22,729,292	26,873,039	1,600,934	Experience gains/losses for 7/1/1994 to 6/30/1995
6/30/1996	(17,793,855)	(20,645,432)	(1,194,627)	Experience gains/losses for 7/1/1995 to 6/30/1996; Revised actuarial assumptions
6/30/1997	(31,021,470)	(35,233,279)	(1,983,528)	Experience gains/losses for 7/1/1996 to 6/30/1997; 2.8% retiree COLA effective 8/1/1996
6/30/1998	12,716,788	14,116,994	774,402	Experience gains/losses for 7/1/1997 to 6/30/1998; Revised average salary definition from 5 years to 3 years; Increase in death benefit from \$2,500 to \$5,000; 3.0% retiree COLA effective 7/1/1997
6/30/1999	(31,317,924)	(33,932,914)	(1,816,293)	Experience gains/losses for 7/1/1998 to 6/30/1999; 2.3% retiree COLA effective 7/1/1998
6/30/2000	(77,707,399)	(82,071,133)	(4,292,074)	Experience gains/losses for 7/1/1999 to 6/30/2000; 1.6% retiree COLA effective 7/1/1999
6/30/2001	26,106,163	26,844,128	1,373,292	Experience gains/losses for 7/1/2000 to 6/30/2001; 2.2% retiree COLA effective 7/1/2000
6/30/2002	(99,948,849)	44,465,495	2,227,677	Experience gains/losses for 7/1/2001 to 6/30/2002; 3.4% retiree COLA effective 7/1/2001

TABLE IV		
STATE POLICE RETIREMENT SYSTEM		
INSURANCE FUND		
DETERMINATION OF ENTRY AGE CONTRIBUTION RATE - JUNE 30, 2002		
ACTUARIAL ACCRUED LIABILITY		
Active Members	\$	71,240,175
Inactive Members		
Retired Members	\$	81,435,378
Beneficiaries		11,941,286
Vested Retirement		828,573
Vested Membership		0
Total - Inactives	\$	94,205,237
Total Actuarial Accrued Liability	\$	165,445,412
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	\$	165,445,412
Less Actuarial Value of Assets		86,867,391
Unfunded Actuarial Accrued Liability	\$	78,578,021
NORMAL COST		
Gross Normal Cost	\$	6,485,122
Less Employee Contributions		0
Net Normal Cost - State	\$	6,485,122
Estimated Annual Salaries	\$	43,961,844
TOTAL ANNUAL EMPLOYER COST		
Contribution Amount		
Normal Cost	\$	6,485,122
Payment on Unfunded Actuarial Accrued Liability		4,586,170
Total Annual Cost	\$	11,071,292
As Percent of Payroll		
Normal Cost		14.75%
Payment on Unfunded Actuarial Accrued Liability		10.43%
Total Annual Cost		25.18%
INSURANCE FUND SHORTFALL		
Full Entry Age Funding Level		25.18%
Current Funding Allocation *		18.47%
Additional to Pick Up By 2016		6.71%
Expected Increase in Insurance Fund Rate in 2003 Valuation		0.41%
* Without regard to any one-year temporary adjustments for actuarial gains		

TABLE V
STATE POLICE RETIREMENT SYSTEM
UNFUNDED ACTUARIAL ACCRUED LIABILITY - INSURANCE FUND - JUNE 30, 2002

Date Established	Amount of Base on		Amortization Payment	Source of Base
	Date Established	Current Valuation Date		
6/30/1996	\$ 73,323,619	\$ 85,074,192	\$ 4,922,733	Cumulative unfunded actuarial accrued liability set up as initial base under revised funding policy (30 year level percent of payroll method)
6/30/1997	8,088,952	9,187,197	517,212	Experience gains/losses for 7/1/1996 to 6/30/1997; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1998	(2,668,212)	(2,961,999)	(162,483)	Experience gains/losses for 7/1/1997 to 6/30/1998; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/1999	(13,378,283)	(14,495,346)	(775,878)	Experience gains/losses for 7/1/1998 to 6/30/1999; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2000	(6,431,546)	(6,792,716)	(355,239)	Experience gains/losses for 7/1/1999 to 6/30/2000; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2001	9,773,380	10,049,652	514,120	Experience gains/losses for 7/1/2000 to 6/30/2001; Impact of actual insurance fund contributions vs. full entry age amounts
6/30/2002	(1,482,959)	(1,482,959)	(74,295)	Experience gains/losses for 7/1/2001 to 6/30/2002; Impact of actual insurance fund contributions vs. full entry age amounts
Total	\$ 67,224,951	\$ 78,578,021	\$ 4,586,170	

**TABLE VI
STATE POLICE RETIREMENT SYSTEM
BENEFIT PAYMENT PROJECTIONS**

RETIREMENT FUND PAYMENT PROJECTIONS

Plan Year	Total
7/1/2002 to 6/30/2003	27,270,000
7/1/2003 to 6/30/2004	28,808,000
7/1/2004 to 6/30/2005	30,376,000
7/1/2005 to 6/30/2006	31,758,000
7/1/2006 to 6/30/2007	34,209,000
7/1/2007 to 6/30/2008	36,049,000
7/1/2008 to 6/30/2009	38,504,000
7/1/2009 to 6/30/2010	40,923,000
7/1/2010 to 6/30/2011	43,177,000
7/1/2011 to 6/30/2012	45,626,000

INSURANCE FUND PAYMENT PROJECTIONS

Plan Year	Total
7/1/2002 to 6/30/2003	4,942,000
7/1/2003 to 6/30/2004	5,580,000
7/1/2004 to 6/30/2005	6,189,000
7/1/2005 to 6/30/2006	6,846,000
7/1/2006 to 6/30/2007	7,724,000
7/1/2007 to 6/30/2008	8,465,000
7/1/2008 to 6/30/2009	9,385,000
7/1/2009 to 6/30/2010	10,427,000
7/1/2010 to 6/30/2011	11,526,000
7/1/2011 to 6/30/2012	12,699,000

Projected benefit payments reflect future actual experience consistent with actuarial assumptions used in current annual valuation. Future cost-of-living adjustments of 3% per annum have been assumed in retirement benefit amounts. Insurance fund payments reflect future medical inflation rates consistent with the valuation assumption. There has not been any assumption made as to the number of future new entrants who may enter the plan. Nor has any provision been made for any change in the basic benefit structure of the plan beyond changes already legislated.

**TABLE VII
STATE POLICE RETIREMENT SYSTEM
RETIREMENT FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002**

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		\$ 438,955,465
Actuarial Present Value of Future Member Contributions		33,841,590
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 41,893,803	
For Unfunded Actuarial Accrued Liability	(58,165,119)	
Total		\$ (16,271,316)
Total Actuarial Assets		\$ 456,525,739
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 252,056,847	
Vested Retirement	376,376	
Vested Membership	65,390	
Total - Inactive		\$ 252,498,613
Actuarial Present Value of Future Benefits		
Active Members:		
Retirement Benefits	\$ 189,982,523	
Disability Benefits	5,380,521	
Withdrawal Benefits (Vested and Refund of Contributions)	3,481,314	
Survivor Benefits	5,182,768	
Total - Active		\$ 204,027,126
Refunds and Expenses Payable		\$ 0
Total Actuarial Liabilities		\$ 456,525,739
Notes		
* Values as of June 30, 2002		
Market value of assets:		\$ 328,744,331
Actuarial value of assets:		\$ 438,955,465
Member's Contribution Account:		\$ 36,886,477
** Present value of accrued benefit deferred to normal retirement date.		

**TABLE VIII
STATE POLICE RETIREMENT SYSTEM
INSURANCE FUND
ACTUARIAL BALANCE SHEET - JUNE 30, 2002**

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable) *		\$ 86,867,391
Actuarial Present Value of Future Member Contributions (Note: All Future Member Contributions Credited Against Retirement Fund)		0
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 72,085,305	
For Unfunded Actuarial Accrued Liability	78,578,021	
Total		\$ 150,663,326
Total Actuarial Assets		\$ 237,530,717
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 93,376,664	
Vested Retirement	828,573	
Vested Membership	0	
Total - Inactive		\$ 94,205,237
Actuarial Present Value of Future Benefits		
Active Members:		\$ 143,325,480
Refunds and Expenses Payable		0
Total Actuarial Liabilities		\$ 237,530,717
Notes		
* Values as of June 30, 2002		
Market value of assets:		\$ 68,074,444
Actuarial value of assets:		\$ 86,867,391

TABLE IX
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - RETIREMENT FUND - JUNE 30, 2002
GASB DISCLOSURE INFORMATION
NUMBER OF MEMBERS

Inactive Members	
Retired Members	819
Beneficiaries	78
Vested Retirements	20
Vested Membership	83
Total Inactive Members	1,000
Active Members	
Vested Members	696
Nonvested Members	306
Total Active Members	1,002
Total Members	2,002

TABLE X
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - INSURANCE FUND - JUNE 30, 2002
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

NUMBER OF MEMBERS		
Contracts in Force - Retirees and Dependents		
(1) Single;	- 100% Paid	193
Pre-Medicare	- 75% Paid	1
	- 50% Paid	4
	- 25% Paid	1
	- 0% Paid	0
(2) Family;	- 100% Paid	129
Pre-Medicare	- 75% Paid	2
	- 50% Paid	0
	- 25% Paid	0
	- 0% Paid	0
(3) Parent +;	- 100% Paid	50
Pre-Medicare	- 75% Paid	0
	- 50% Paid	0
	- 25% Paid	0
	- 0% Paid	0
(4) Couple;	- 100% Paid	231
Pre-Medicare	- 75% Paid	3
	- 50% Paid	0
	- 25% Paid	1
	- 0% Paid	0
(5) Medicare Regular	- 100% Paid	11
	- 75% Paid	0
	- 50% Paid	0
	- 25% Paid	0
	- 0% Paid	0
(6) Medicare High Option	- 100% Paid	295
	- 75% Paid	4
	- 50% Paid	2
	- 25% Paid	2
	- 0% Paid	0
Vested Retirements		20
Vested Membership		83
Active Members		1,002
UNFUNDED MEDICAL BENEFIT OBLIGATION		
Medical Benefit Obligation		
Retirees, Beneficiaries and Vested Terminated Members	\$	94,205,237
Active Members		71,240,175
Total Medical Benefit Obligation	\$	165,445,412
Net Assets at Actuarial Value	\$	86,867,391
Unfunded Medical Benefit Obligation	\$	78,578,021
NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method		

SECTION IV

COMMENTS AND CERTIFICATION

Comments

For the Retirement Fund, the total Actuarial Accrued Liability has increased from \$356,211,860 on June 30, 2001 to \$380,790,346 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from (\$99,948,849) to (\$58,165,119). Total actuarial value of assets as of June 30, 2002 was equal to \$438,955,465. The Unfunded Actuarial Accrued Liability increased from (226.08%) to (132.31%) as a percentage of annual payroll and increased from (28.1%) to (15.3%) as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

For the Insurance Fund, the total Actuarial Accrued Liability has increased from \$158,261,479 on June 30, 2001 to \$165,445,412 on June 30, 2002. The Unfunded Actuarial Accrued Liability has increased from \$78,397,902 to \$78,578,021. Total actuarial value of assets as of June 30, 2002 was equal to \$86,867,391. The Unfunded Actuarial Liability decreased from 49.5% to 47.5% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 2002.

The change in contribution rate between the 2001 and 2002 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

June 30, 2001 Contribution Rate	21.58%
Change in Payment Percentage Due to Covered Payroll Experience	(0.65%)
Investment Return Experience	3.59%
Salary Increase Experience	(0.11%)
Decrements Experience*	0.87%
Change in Insurance Fund Rate	
> One-Year Temporary Funding Rate	(2.64%)
> Increase in Long Term Funding Rate	0.00%
Change in Administrative Expense Rate	(0.24%)
Retiree COLA Effective 7/1/2001	0.87%
Legislated Changes	None
Reduction in Amount Available from Prior Year Retirement Fund Rate to Offset Current Year Increases	(1.69%)
June 30, 2002 Contribution Rate	21.58%
* Includes mortality, disability, termination of employment and retirement experience.	

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses is 2.64%. An additional 18.94% is required to fund medical insurance for retirees, bringing the required contribution up to 21.58%. This is the same as the current 21.58% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 2003 should remain at the 21.58% level, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 2003 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

STATE POLICE RETIREMENT SYSTEM - RETIREMENT FUND					
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets
1958	\$ 1,450,000	\$ 1,450,000	100.0%	\$ 0	\$ 0
1963	4,553,258	2,008,476	44.1%	2,544,782	619,167
1968	9,079,139	3,288,103	36.2%	5,791,036	789,709
1971	11,828,727	2,441,888	20.6%	9,386,839*	1,339,726
1974	17,737,434	3,179,448	17.9%	14,557,986*	1,935,105
1975	23,182,081	6,169,445	26.6%	17,012,636*	2,454,650
1976	28,693,129	8,231,367	28.7%	20,461,762*	3,449,126
1977	34,561,413	10,436,161	30.2%	24,125,252*	3,663,490
1978	49,950,102	21,440,957	42.9%	28,509,145*	4,383,893
1979	55,391,206	21,487,985	38.8%	33,903,221*	5,394,076
1980	67,580,562	26,663,397	39.5%	40,917,165*	7,013,944
1981	71,526,728	23,296,425	32.6%	48,230,303	7,313,138
1982	78,713,172	21,383,042	27.2%	57,330,130	9,099,827
1983	81,944,546	16,187,460	19.8%	65,757,086	8,426,956
1984	91,180,668	16,200,151	17.8%	74,980,517	9,223,431
1985	99,269,825	14,253,583	14.4%	85,016,242	10,035,725
1986	105,559,951	8,892,252	8.4%	96,667,699	11,651,457
1987	111,541,989	1,347,385	1.2%	110,194,604	13,526,905
1988	120,128,367	(870,182)	(0.8%)	120,998,549	10,803,945
1989	134,550,773	3,200,220	2.4%	131,350,553	10,352,004
1990	154,007,622	8,982,071	5.8%	145,025,551	13,674,998
1991	170,009,955	1 9,191,881	11.3%	150,818,074	5,792,523
1992**	182,996,056	(4,794,955)	(2.6%)	187,791,011	36,972,937
1993	191,653,594	(8,667,374)	(4.5%)	200,320,968	12,529,957
1994	206,763,310	1,442,801	0.7%	205,320,509	4,999,541
1995	241,690,631	24,186,188	10.0%	217,504,443	12,183,934
1996	244,540,812	7,025,466	2.9%	237,515,346	20,010,903
1997	255,784,758	(23,858,517)	(9.3%)	279,643,275	42,127,929
1998	294,427,019	(11,891,899)	(4.0%)	306,318,918	26,675,643
1999	314,021,673	(43,601,523)	(13.9%)	357,623,196	51,304,278
2000	336,579,763	(122,588,811)	(36.4%)	459,168,574	101,545,378
2001***	356,211,860	(99,948,849)	(28.1%)	456,160,709	(3,007,865)
2002	380,790,346	(58,165,119)	(15.3%)	438,955,465	(17,205,244)
*Includes capitalized appreciation of investments.					
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

STATE POLICE RETIREMENT SYSTEM - INSURANCE FUND					
July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value of Assets	Increase in Assets
1990	\$ 64,784,801	\$ 58,268,284	89.9%	\$ 6,516,517	\$ N/A
1991	74,163,248	65,231,704	88.0%	8,931,544	2,415,027
1992	88,407,634	76,689,678	86.7%	11,717,956	2,786,412
1993	95,290,099	81,004,620	85.0%	14,285,479	2,567,523
1994	110,193,139	92,782,467	84.2%	17,410,672	3,125,193
1995	118,995,732	97,795,537	82.2%	21,200,195	3,789,523
1996**	101,132,886	73,323,619	72.5%	27,809,267	6,609,072
1997	117,361,754	83,485,271	71.1%	33,876,483	6,067,216
1998	124,501,076	83,090,576	66.7%	41,410,500	7,534,017
1999	125,797,150	71,867,291	57.1%	53,929,859	12,519,359
2000	138,867,085	67,155,373	48.4%	71,711,712	17,781,853
2001***	158,261,479	78,397,902	49.5%	79,863,577	8,151,865
2002	165,445,412	78,578,021	47.5%	86,867,391	7,003,814
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.					
***Change in asset valuation method effective in this valuation to 5-year smoothing of investment gains/(losses).					

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the State Police Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and based on continuation of current funding policies adopted by the Board, that adequate provision is being made for the funding of future benefits.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Stephen A. Gagel, F.S.A.

Date

Edward W. Maynard, F.S.A.

Date

Mercer Human Resource Consulting
462 South Fourth Street, Suite 1500
Louisville, Kentucky 40202-3415
☎(502) 561-4500

SECTION V
STATISTICAL DATA
AS OF
JUNE 30, 2002

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2002

EARNINGS BY AGE GROUPS

AGE GROUP	MALE			FEMALE			TOTAL		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0-19	2	25,284	12,642	0	0	0	2	25,284	12,642
20-24	65	1,782,144	27,418	3	43,200	14,400	68	1,825,344	26,843
25-29	173	5,680,968	32,838	12	398,832	33,236	185	6,079,800	32,864
30-34	234	9,137,916	39,051	12	516,120	43,010	246	9,654,036	39,244
35-39	182	8,277,960	45,483	5	229,896	45,979	187	8,507,856	45,497
40-44	133	6,730,932	50,609	7	361,092	51,585	140	7,092,024	50,657
45-49	108	6,289,620	58,237	3	189,216	63,072	111	6,478,836	58,368
50-54	50	3,423,312	68,466	0	0	0	50	3,423,312	68,466
55-59	12	845,556	70,463	0	0	0	12	845,556	70,463
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	1	29,796	29,796	0	0	0	1	29,796	29,796
75+	0	0	0	0	0	0	0	0	0
TOTAL	960	42,223,488	43,983	42	1,738,356	41,389	1,002	43,961,844	43,874

EARNINGS BY SERVICE GROUPS

SERVICE GROUP	MALE			FEMALE			TOTAL		
	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE	COUNT	EARNINGS	AVERAGE
0	64	1,370,196	21,409	4	68,580	17,145	68	1,438,776	21,158
1	12	354,900	29,575	0	0	0	12	354,900	29,575
2	109	3,284,928	30,137	3	91,296	30,432	112	3,376,224	30,145
3	46	1,507,056	32,762	4	127,104	31,776	50	1,634,160	32,683
4	2	68,664	34,332	0	0	0	2	68,664	34,332
0-4	233	6,585,744	28,265	11	286,980	26,089	244	6,872,724	28,167
5-9	257	10,232,892	39,817	16	653,688	40,856	273	10,886,580	39,878
10-14	150	6,973,116	46,487	5	247,380	49,476	155	7,220,496	46,584
15-19	149	7,681,632	51,555	8	417,804	52,226	157	8,099,436	51,589
20-24	77	4,370,460	56,759	2	132,504	66,252	79	4,502,964	57,000
25-29	59	3,882,324	65,802	0	0	0	59	3,882,324	65,802
30-34	33	2,356,344	71,404	0	0	0	33	2,356,344	71,404
35-39	2	140,976	70,488	0	0	0	2	140,976	70,488
40+	0	0	0	0	0	0	0	0	0
TOTAL	960	42,223,488	43,983	42	1,738,356	41,389	1,002	43,961,844	43,874

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2002

SERVICE GROUPS BY AGE GROUPS

MALE

AGE GROUP	0-4	5-9	10-14	15-19	SERVICE GROUP 20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2									2
20-24	65									65
25-29	101	72								173
30-34	48	142	43	1						234
35-39	11	38	82	50	1					182
40-44	5	3	24	72	25	4				133
45-49		1		26	45	33	3			108
50-54			1		6	22	19	2		50
55-59		1					11			12
60-64										0
65-69										0
70-74	1									1
75+										0
TOTAL	233	257	150	149	77	59	33	2	0	960

FEMALE

AGE GROUP	0-4	5-9	10-14	15-19	SERVICE GROUP 20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	3									3
25-29	6	6								12
30-34	2	8	2							12
35-39		2	3							5
40-44				7						7
45-49				1	2					3
50-54										0
55-59										0
60-64										0
65-69										0
70-74										0
75+										0
TOTAL	11	16	5	8	2	0	0	0	0	42

TOTAL

AGE GROUP	0-4	5-9	10-14	15-19	SERVICE GROUP 20-24	25-29	30-34	35-39	40+	TOTAL
0-19	2									2
20-24	68									68
25-29	107	78								185
30-34	50	150	45	1						246
35-39	11	40	85	50	1					187
40-44	5	3	24	79	25	4				140
45-49		1		27	47	33	3			111
50-54			1		6	22	19	2		50
55-59		1					11			12
60-64										0
65-69										0
70-74	1									1
75+										0
TOTAL	244	273	155	157	79	59	33	2	0	1,002

STATE POLICE RETIREMENT SYSTEM
JUNE 30, 2002

AVERAGE EARNINGS FOR SERVICE GROUPS BY AGE GROUPS

AGE GROUP	SERVICE GROUP.....										TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+		
0-19	2										2
	12,642										12,642
20-24	68										68
	26,843										26,843
25-29	107	78									185
	28,982	38,189									32,864
30-34	50	150	45	1							246
	28,740	40,742	45,752	46,824							39,244
35-39	11	40	85	50	1						187
	28,643	40,035	47,108	50,622	56,064						45,497
40-44	5	3	24	79	25	4					140
	27,828	39,516	46,334	52,310	54,731	55,386					50,657
45-49		1		27	47	33	3				111
		37,116		51,445	58,104	64,382	65,740				58,368
50-54			1		6	22	19	2			50
			45,432		57,956	69,826	71,210	70,488			68,466
55-59		1					11				12
		39,420					73,285				70,463
60-64											0
65-69											0
70-74	1										1
	29,796										29,796
75+											0
TOTAL	244	273	155	157	79	59	33	2	0	1,002	
	28,167	39,878	46,584	51,589	57,000	65,802	71,404	70,488			43,874

TOTAL EARNINGS 43,961,844
 AVERAGE AGE 35.71
 AVERAGE SERVICE 11.40

Note: Earnings shown in this matrix have not been limited by 401(a)(17).

STATE POLICE RETIREMENT SYSTEM
 TABULATION BY MONTHLY SALARY - JUNE 30, 2002

<u>MONTHLY SALARY</u>	<u>NUMBER OF MEMBERS</u>		
	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>
UNDER \$ 500	9	1	10
\$ 500 - \$ 749	1	0	1
\$ 750 - \$ 999	1	0	1
\$ 1,000 - \$ 1,249	3	0	3
\$ 1,250 - \$ 1,499	0	1	1
\$ 1,500 - \$ 1,749	1	0	1
\$ 1,750 - \$ 1,999	0	0	0
\$ 2,000 - \$ 2,249	50	2	52
\$ 2,250 - \$ 2,499	58	0	58
\$ 2,500 - \$ 2,749	97	8	105
\$ 2,750 - \$ 2,999	48	4	52
\$ 3,000 - \$ 3,499	182	5	187
\$ 3,500 - \$ 3,999	189	10	199
\$ 4,000 - \$ 4,499	137	4	141
\$ 4,500 - \$ 4,999	70	6	76
\$ 5,000 - \$ 5,499	54	0	54
\$ 5,500 - \$ 5,999	29	0	29
\$ 6,000 - \$ 6,499	20	0	20
\$ 6,500 - \$ 6,999	6	0	6
\$ 7,000 - \$ 7,499	0	1	1
\$ 7,500 - \$ 7,999	4	0	4
\$ 8,000 - \$ 8,499	1	0	1
\$ 8,500 - \$ 8,999	0	0	0
\$ 9,000 - \$ 9,499	0	0	0
\$ 9,500 - \$ 9,999	0	0	0
\$ 10,000 AND OVER	0	0	0
TOTAL	960	42	1,002
HIGHLY COMPENSATED EMPLOYEES (ESTIMATED) ANNUAL SALARY OF \$85,000 AND OVER	5	0	5

STATE POLICE RETIREMENT SYSTEM
MEMBERS WITH SERVICE IN ANOTHER SYSTEM
JUNE 30, 2002

MEMBERS CURRENTLY ACTIVE IN SPRS			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	3	112	115
KERS - HAZARDOUS	0	24	24
CERS - NONHAZARDOUS	6	109	115
CERS - HAZARDOUS	4	73	77
TOTAL - ALL SYSTEMS	13	318	331

MEMBERS CURRENTLY NOT ACTIVE IN SPRS			
<u>SERVICE IN</u>	<u>ACTIVE IN OTHER SYSTEM</u>	<u>INACTIVE IN OTHER SYSTEM</u>	<u>TOTAL</u>
KERS - NONHAZARDOUS	14	13	27
KERS - HAZARDOUS	10	1	11
CERS - NONHAZARDOUS	19	14	33
CERS - HAZARDOUS	45	3	48
TOTAL - ALL SYSTEMS	88	31	119

NOTE: DOES NOT INCLUDE INDIVIDUALS IN PAY STATUS IN OTHER SYSTEMS

STATE POLICE RETIREMENT SYSTEM
 RETIRED LIVES SUMMARY
 JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	71	174,843.84	6	5,789.72	77	180,633.56
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	111	255,236.49	1	915.43	112	256,151.92
66-2/3% TO BENEFICIARY	62	176,360.21	0	0.00	62	176,360.21
50% TO BENEFICIARY	62	164,887.12	2	2,057.08	64	166,944.20
POP-UP OPTION	215	597,639.04	2	1,163.17	217	598,802.21
10 YEARS CERTAIN	5	18,627.56	1	2,335.00	6	20,962.56
10 YEARS CERTAIN & LIFE	23	60,250.90	0	0.00	23	60,250.90
SOCIAL SECURITY OPTION						
OPTION C	34	72,439.57	1	1,745.59	35	74,185.16
OPTION D	164	349,955.26	5	3,816.96	169	353,772.22
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	8	2,151.76	5	1,481.35	13	3,633.11
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	10	22,097.76	0	0.00	10	22,097.76
20 YEARS CERTAIN & LIFE	27	62,046.43	4	3,455.77	31	65,502.20
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	792	1,956,535.94	27	22,760.07	819	1,979,296.01

STATE POLICE RETIREMENT SYSTEM
 BENEFICIARY SUMMARY
 JUNE 30, 2002

	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
BASIC FORM	0	0.00	0	0.00	0	0.00
STRAIGHT LIFE (OLD PLAN)	0	0.00	0	0.00	0	0.00
JOINT & SURVIVOR						
100% TO BENEFICIARY	2	3,331.99	47	97,452.40	49	100,784.39
66-2/3% TO BENEFICIARY	0	0.00	1	1,207.58	1	1,207.58
50% TO BENEFICIARY	1	1,031.23	8	10,849.46	9	11,880.69
POP-UP OPTION	0	0.00	6	15,608.71	6	15,608.71
10 YEARS CERTAIN	0	0.00	0	0.00	0	0.00
10 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
SOCIAL SECURITY OPTION						
OPTION C	0	0.00	0	0.00	0	0.00
OPTION D	0	0.00	10	21,003.04	10	21,003.04
OPTION E	0	0.00	0	0.00	0	0.00
OPTION F	0	0.00	0	0.00	0	0.00
DEPENDENT CHILD	1	257.27	0	0.00	1	257.27
REFUND	0	0.00	0	0.00	0	0.00
15 YEARS CERTAIN & LIFE	0	0.00	0	0.00	0	0.00
20 YEARS CERTAIN & LIFE	0	0.00	2	7,518.19	2	7,518.19
5 YEARS ONLY	0	0.00	0	0.00	0	0.00
TOTAL	4	4,620.49	74	153,639.38	78	158,259.87

STATE POLICE RETIREMENT SYSTEM
 VESTED RETIREMENT SUMMARY
 JUNE 30, 2002

AGE NEAREST BIRTHDAY	MALE LIVES		FEMALE LIVES		TOTAL	
	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS	NUMBER	MONTHLY BENEFITS
15-19	0	0.00	0	0.00	0	0.00
20-24	0	0.00	0	0.00	0	0.00
25-29	2	822.70	0	0.00	2	822.70
30-34	7	2,909.54	0	0.00	7	2,909.54
35-39	2	767.20	1	279.99	3	1,047.19
40-44	5	2,682.70	1	1,357.13	6	4,039.83
45-49	0	0.00	0	0.00	0	0.00
50-54	2	996.05	0	0.00	2	996.05
55-59	0	0.00	0	0.00	0	0.00
60-64	0	0.00	0	0.00	0	0.00
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	18	8,178.19	2	1,637.12	20	9,815.31

STATE POLICE RETIREMENT SYSTEM
 VESTED MEMBERSHIP SUMMARY
 JUNE 30, 2002

<u>AGE NEAREST BIRTHDAY</u>	<u>MALE LIVES</u>		<u>FEMALE LIVES</u>		<u>TOTAL</u>	
	<u>NUMBER</u>	<u>ACCUMULATED CONTRIBUTIONS</u>	<u>NUMBER</u>	<u>ACCUMULATED CONTRIBUTIONS</u>	<u>NUMBER</u>	<u>ACCUMULATED CONTRIBUTIONS</u>
15-19	6	74.15	0	0.00	6	74.15
20-24	2	264.98	0	0.00	2	264.98
25-29	16	22,848.18	4	3,602.11	20	26,450.29
30-34	21	16,752.60	1	16.01	22	16,768.61
35-39	16	11,527.11	2	2,509.24	18	14,036.35
40-44	7	3,885.90	1	406.41	8	4,292.31
45-49	3	3,669.13	0	0.00	3	3,669.13
50-54	2	222.23	0	0.00	2	222.23
55-59	1	58.57	0	0.00	1	58.57
60-64	1	7,599.05	0	0.00	1	7,599.05
65-69	0	0.00	0	0.00	0	0.00
70-74	0	0.00	0	0.00	0	0.00
75-79	0	0.00	0	0.00	0	0.00
80-84	0	0.00	0	0.00	0	0.00
85 +	0	0.00	0	0.00	0	0.00
TOTAL	75	66,901.90	8	6,533.77	83	73,435.67

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the State Police Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 2002.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the three highest paid fiscal years.

Service

Service means the sum of prior service and current service as defined below:

- (a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.
- (b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.
- (c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

The Bureau of State Police shall participate in the System. Membership in the system consists of all regular full-time officers of the Kentucky State Police who are entitled to exercise the powers of police officers.

Normal Retirement Date

A member may elect to retire upon attaining age 55 and having contributed to the System. Upon completion of 20 years of service credit, 15 of which are current service, a member may declare the normal retirement date to be some date prior to age 55.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

A monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member who retires on or after the normal retirement date with less than 60 months of service is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a member has 20 or more years of service credit (15 of which are current), an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 55th birthday up to a maximum of service credited to the last day of paid employment. Except for members with 20 or more years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 20 years. For members with 20 or more years of service credit, actual service will be used. The retirement benefit shall not be less than 25% of the member's final monthly rate of pay for those disabled in the line of duty. Ten percent of final monthly rate of pay for each dependent child is also payable if disability occurs in line of duty. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member dies in the line of duty and has a spouse as beneficiary, a \$5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member dies in the line of duty and has a dependent as beneficiary, a lump sum payment of \$10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee under KERS and CERS, using 2.50% rather than the non-hazardous benefit rate.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of \$5,000 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include an annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 8% of gross compensation until age 55. On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The retirement system will pay a portion of the cost of participation for the retiree and dependents based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

Effective August 1, 1996, and on July 1 of each year thereafter, a recipient of a retirement allowance shall have his retirement allowance increased by the percentage increase in the annual average of the consumer price index for all urban consumers for the most recent calendar year as published by the federal Bureau of Labor Statistics, not to exceed five percent (5%). In determining the annual employer contribution rate, only the cost of increases granted as of the most recent valuation date shall be recognized. The benefits of this subsection as provided on August 1, 1996 and thereafter shall not be considered as benefits protected by the inviolable contract provisions of KRS 61.692, 16.652, and 78.852. The General Assembly reserves the right to suspend or reduce the benefits conferred in this subsection if in their judgment the welfare of the Commonwealth so demands.

